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GENUINE ARTICLE#: 289MP  
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OXON, ENGLAND  
ISSN: 0950-382X  
LANGUAGE: English DOCUMENT TYPE: ARTICLE

ABSTRACT: We identified an exported protease in *Lactococcus lactis* ssp. *lactis* strain IL1403 belonging to the *HtrA*/DegP family. Inactivation of the chromosomal gene (*HtrA*(L1)) encoding this protease (*HtrA*(L1)) results in growth thermo-sensitivity at very high temperatures (above 37 degrees C for *L. lactis*). The role of *HtrA*(L1) in extracellular proteolysis under normal growth conditions was examined by testing the stability of different exported proteins (i.e. fusions, a heterologous pre-pro-protein or a native protein containing repeats), having different locations. In the wild-type (wt) strain, degradation products, including the C-terminal protein ends, were present in the medium, indicating that proteolysis occurs during or after export to the cell surface; in one case, degradation was nearly total. In contrast, proteolysis was totally abolished in the *HtrA* strain for all five proteins tested, and the yield of full-length products was significantly increased. These results suggest that *HtrA*(L1) is the sole extracellular protease that degrades abnormal exported proteins. In addition, our results reveal that *HtrA*(L1) is needed for the pro-peptide processing of a natural pro-protein and for maturation of a native protein. We propose that in lactococci, and possibly in other Gram-positive organisms with small sized-genomes, a single surface protease, *HtrA*, is totally responsible for the housekeeping of exported proteins.

7/3,AB/4 (Item 1 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT  
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00968329

IMPROVED METHODS FOR BINDING ACMA-TYPE PROTEIN ANCHOR FUSIONS TO CELL-WALL MATERIAL OF MICRO-ORGANISMS

TECHNIQUE AMELIOREE PERMETTANT DE FIXER DES FUSIONS D'ANCRAGE DE PROTEINES DE TYPE ACMA A LA PAROI CELLULAIRE DE MICRO-ORGANISMES

Patent Applicant/Assignee:

APPLIED NANOSYSTEMS B V, Ubbo Emmiusingel 37, NL-9711 BC Groningen, NL,  
NL (Residence), NL (Nationality), (For all designated states except:  
US)

Patent Applicant/Inventor:

LEENHOUTS Cornelis Johannes, Tussenkoelen 6, NL-9753 KX Haren, NL, NL  
(Residence), NL (Nationality), (Designated only for: US)  
RAMASAMY Ranjan, 137/3 Kirula Road, Colombo 05, LK, LK (Residence), LK  
(Nationality), (Designated only for: US)  
STEEN Anton, Zonland 143, NL-9734 BR Groningen, NL, NL (Residence), NL  
(Nationality), (Designated only for: US)  
KOK Jan, Van Hamelstraat 34, NL-9714 HL Groningen, NL, NL (Residence), NL  
(Nationality), (Designated only for: US)  
BUIST Girbe, Noordbroeksterstraat 88, NL-9611 BN Sappemeer, NL, NL  
(Residence), NL (Nationality), (Designated only for: US)  
KUIPERS Oscar Paul, Lepelaar 95, NL-9728 XG Groningen, NL, NL (Residence)  
, NL (Nationality), (Designated only for: US)

Legal Representative:

PRINS A W (agent), c/o Vereenigde, Nieuwe Parklaan 97, NL-2587 BN The  
Hague, NL,

Patent and Priority Information (Country, Number, Date):

Patent: WO 2002101026 A2 20021219 (WO 02101026)

Application: WO 2002NL383 20020611 (PCT/WO NL0200383)

Priority Application: EP 2001202239 20010611

Designated States: AE AG AL AM AT (utility model) AT AU AZ BA BB BG BR BY  
BZ CA CH CN CO CR CU CZ (utility model) CZ DE (utility model) DE DK

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to this  
score

Appt cont

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growth when the lipase was overexpressed in the presence of salt in the medium. Like PrsA of *B. subtilis* and PrtM of *L. lactis*, the *L. lactis* PmpA protein could thus have a foldase activity that facilitates protein secretion. These proteins belong to the third family of peptidyl-prolyl cis/trans-isomerases (PPIases) for which parvulin is the prototype. Almost all PLP from *gram*-*positive* bacteria contain a domain with the PPIase signature. An exception to this situation was found only in Streptococcaceae, the family to which *L. lactis* belongs. PLP from *Streptococcus pneumoniae* and *Enterococcus faecalis* possess this signature, but those of *L. lactis*, *Streptococcus pyogenes*, and *Streptococcus mutans* do not. However, secondary structure predictions suggest that the folding of PLP is conserved over the entire length of the proteins, including the unconserved signature region. The activity associated with the expression of PmpA in *L. lactis* and these genomic data show that either the PPIase motif is not necessary for PPIase activity or, more likely, PmpA foldase activity does not necessarily require PPIase activity.

7/3,AB/2 (Item 2 from file: 440)  
DIALOG(R)File 440:Current Contents Search(R)  
(c) 2003 Inst for Sci Info. All rts. reserv.

14041220 Document Delivery Available: 000176030100068 References: 41  
TITLE: Controlled production of stable heterologous proteins in  
%Lactococcus% lactis  
AUTHOR(S): Miyoshi A; Poquet I; Azevedo V; Commissaire J; Bermudez-Humaran L; Domakova E; Le Lohr Y; Oliveira SC; Gruss A; Langella P (REPRINT)  
AUTHOR(S) E-MAIL: langella@jouy.inra.fr  
CORPORATE SOURCE: INRA, Unite Rech Laitieres & Genet Appl, Domaine Vilvert/F-78352 Jouy En Josas//France/ (REPRINT); INRA, Unite Rech Laitieres & Genet Appl, /F-78352 Jouy En Josas//France/; Univ Fed Minas Gerais, Inst Biol Sci, /Belo Horizonte/MG/Brazil/; Univ Autonoma Nuevo Leon, Fac Ciencias Biol, /San Nicolas De Los Garza/Nuevo Leon/Mexico/  
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PUBLICATION: APPLIED AND ENVIRONMENTAL MICROBIOLOGY, 2002, V68, N6 (JUN), P 3141-3146  
GENUINE ARTICLE#: 559MN  
PUBLISHER: AMER SOC MICROBIOLOGY, 1752 N ST NW, WASHINGTON, DC 20036-2904 USA  
ISSN: 0099-2240  
LANGUAGE: English DOCUMENT TYPE: ARTICLE

ABSTRACT: The use of %Lactococcus% lactis (the most extensively characterized lactic acid bacterium) as a delivery organism for heterologous proteins is, in some cases, limited by low production levels and poor-quality products due to surface proteolysis. In this study, we combined in one *L. lactis* strain use of the nisin-inducible promoter P-nisA and inactivation of the extracellular housekeeping protease %HtrA%. The ability of the mutant strain, designated %htrA%-NZ9000, to produce high levels of stable proteins was confirmed by using the staphylococcal nuclease (Nuc) and the following four heterologous proteins fused or not fused to Nuc that were initially unstable in wild-type *L. lactis* strains: (i) *Staphylococcus hyicus* lipase, (ii) the bovine rotavirus antigen nonstructural protein 4, (iii) human papillomavirus antigen E7, and (iv) *Brucella abortus* antigen L7/L12. In all cases, protein degradation was significantly lower in strain %htrA%-NZ9000, demonstrating the usefulness of this strain for stable heterologous protein production.

7/3,AB/3 (Item 3 from file: 440)  
DIALOG(R)File 440:Current Contents Search(R)  
(c) 2003 Inst for Sci Info. All rts. reserv.

11407871 References: 44  
TITLE: %HtrA% is the unique surface housekeeping protease in %Lactococcus% lactis and is required for natural protein processing  
AUTHOR(S): Poquet I (REPRINT); Saint V; Seznec E; Simoes N; Bolotin A; Gruss A  
AUTHOR(S) E-MAIL: poquet@biotec.jouy.inra.fr

USES  
BACTERIES A GRAM POSITIF DEPOURVUES D'ACTIVITE PROTEASIQUE %HtrA%, ET LEURS  
UTILISATIONS

Patent Applicant/Assignee:  
INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE,  
POQUET Isabelle,  
GRUSS Alexandra,  
BOLOTINE Alexandre,  
SOROKINE Alexei,

Inventor(s):  
POQUET Isabelle,  
GRUSS Alexandra,  
BOLOTINE Alexandre,  
SOROKINE Alexei,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200039309 A1 20000706 (WO 0039309)  
WO 99FR3270 19991223 (PCT/WO FR9903270)

Application: FR 9816462 19981224

Priority Application: FR 9816462 19981224  
Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK  
DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ  
TM TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ TZ UG ZW AM  
AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL  
PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

Publication Language: French  
Fulltext Word Count: 9474

#### English Abstract

The invention concerns bacteria strains, obtained from %gram%-&positive% bacteria whereof the genome size is not more than 3.2 Mb, and wherein the %HtrA% surface protease is inactive. Said strains are useful for expressing exported proteins of interest.

#### French Abstract

L'invention concerne des souches bacteriennes, obtenues a partir de bacteries a gram-positif dont la taille du genome est au plus egale a 3,2 Mb, et dans lesquelles la protease de surface %HtrA% est inactive. Ces souches sont utilisables pour l'expression de proteines d'interet exportees.

5/3,AB/9 (Item 9 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT  
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00429225

NOVEL CODING SEQUENCES  
NOUVELLES SEQUENCES CODANTES

Patent Applicant/Assignee:  
SMITHKLINE BEECHAM CORPORATION,  
SMITHKLINE BEECHAM PLC,  
BLACK Michael Terance,  
HODGSON John Edward,  
KNOWLES David Justin Charles,  
LONETTO Michael Arthur,  
NICHOLAS Richard Oakley,  
REID Robert H Jr,  
ZARFOS Phillip N,

Inventor(s):  
BLACK Michael Terance,  
HODGSON John Edward,  
KNOWLES David Justin Charles,  
LONETTO Michael Arthur,  
NICHOLAS Richard Oakley,  
REID Robert H Jr,  
ZARFOS Phillip N,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9819689 A1 19980514  
Application: WO 97US19226 19971027 (PCT/WO US9719226)

*app, art*

AUTHOR ADDRESS: (a)Dep. Microbiol., Oral Health Sci. Cent., Tokyo Dent.  
Coll., 1-2-2 Masago, Mihama-ku, Chiba 261-8\*\*Japan  
JOURNAL: Journal of Bacteriology 180 (15):p3837-3844 Aug., 1998  
ISSN: 0021-9193  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: English

parasite

ABSTRACT: Prolyl-phenylalanine-specific serine protease (dentilisin) is a major extracellular protease produced by *Treponema denticola*. The gene, *prtP*, coding for the protease was recently cloned and sequenced (K. Ishihara, T. Miura, H. K. Kuramitsu, and K. Okuda, Infect. Immun. 64:5178-5186, 1996). In order to determine the role of this protease in the physiology and virulence of *T. denticola*, a dentilisin-deficient mutant, K1, was constructed following electroporation with a *prtP*-inactivated DNA fragment. No chymotrypsin-like protease activity was detected in the dentilisin-deficient mutant. In addition, the high-molecular-mass oligomeric protein characteristic of the outer sheath of the organism decreased in the mutant. Furthermore, the hydrophobicity of the mutant was decreased, and coaggregation of the mutant with *Fusobacterium nucleatum* was enhanced compared to that of the wild-type organism. The results obtained with a mouse abscess model system indicated that the virulence of the mutant was attenuated relative to that of the wild-type organism. These results suggest that dentilisin activity plays a major role in the structural organization of the outer sheath of *T. denticola*. The loss of dentilisin activity and the structural change in the outer sheath affect the pathogenicity of *T. denticola*.

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gram<sup>+</sup>

1998

8/3,AB/12 (Item 1 from file: 399)  
DIALOG(R)File 399:CA SEARCH(R)  
(c) 2003 American Chemical Society. All rts. reserv.

133085092 CA: 133(7)85092u PATENT  
Gram-positive bacteria deficient in the htrA proteinase involved in the degradation of secreted proteins and their uses  
INVENTOR(AUTHOR): Poquet, Isabelle; Gruss, Alexandra; Bolotine, Alexandre ; Sorokine, Alexei  
LOCATION: Fr.  
ASSIGNEE: Institut National de la Recherche Agronomique  
PATENT: PCT International ; WO 200039309 A1 DATE: 20000706  
APPLICATION: WO 99FR3270 (19991223) \*FR 9816462 (19981224)  
PAGES: 43 pp. CODEN: PIXXD2 LANGUAGE: French CLASS: C12N-015/57A;  
C12N-009/52B; C12R-001/225B DESIGNATED COUNTRIES: AE; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; CA; CH; CN; CR; CU; CZ; DE; DK; DM; EE; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MA; MD; MG; MK; MN; MW; MX; NO; NZ; PL; PT; RO; RU; SD; SE; SG; SI; SK; SL; TJ; TM; TR; TT; TZ; UA; UG; US; UZ; VN; YU; ZA; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM DESIGNATED REGIONAL: GH; GM; KE; LS; MW; SD; SL; SZ ; TZ; UG; ZW; AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE; BF; BJ; CF; CG; CI; CM; GA; GN; GW; ML; MR; NE; SN; TD; TG

8/3,AB/13 (Item 1 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00883782  
NOVEL NUCLEIC ACIDS AND POLYPEPTIDES  
NOUVEAUX ACIDES NUCLEIQUES ET POLYPEPTIDES  
Patent Applicant/Assignee:  
HYSEQ INC, 670 Almanor Avenue, Sunnyvale, CA 94086, US, US (Residence),  
US (Nationality), (For all designated states except: US)  
Patent Applicant/Inventor:  
TANG Y Tom, 4230 Ranwick Court, San Jose, CA 95118, US, US (Residence),  
US (Nationality), (Designated only for: US)



Set	Items	Description
S1	2151	HTRA
S2	192	S1 AND GRAM (1W) POSITIVE
S3	155	RD (unique items)
S4	12	S3 AND LACTOBACILLUS
S5	12	RD (unique items)
S6	12	S3 AND LACTOCOCCUS
S7	12	RD (unique items)
S8	124	S3 AND STREPTOCOCCUS
S9	124	RD (unique items)
S10	124	S9 AND HTRA
S11	101	S10 AND MUTANT
S12	10	S11 NOT PY>1998
S13	92	S3 AND STAPHYLOCOCCUS
S14	92	RD (unique items)
S15	6	S14 NOT PY>1998
S16	96	S3 AND LISTERIA
S17	96	RD (unique items)
S18	96	S17 AND HTRA
S19	3	S18 NOT PY>1998

? t s19/3,ab/1-3

>>>No matching display code(s) found in file(s): 65, 107, 128-129, 135, 225, 342, 345, 398, 449, 767

19/3,AB/1 (Item 1 from file: 349)  
 DIALOG(R)File 349:PCT FULLTEXT  
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00357724

VECTORS FOR THE DIAGNOSIS AND TREATMENT OF SOLID TUMORS INCLUDING MELANOMA  
 VECTEURS DESTINES AU DIAGNOSTIC ET AU TRAITEMENT DE TUMEURS SOLIDES  
 NOTAMMENT DU MELANOME

Patent Applicant/Assignee:

YALE UNIVERSITY,

Inventor(s):

PAWELEK John M,  
 BERMUDES David,  
 LOW Kenneth B,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9640238 A1 19961219

Application: WO 96US10250 19960605 (PCT/WO US9610250)

Priority Application: US 95422 19950607; US 96658034 19960604

Designated States: AL AM AU AZ BB BG BR BY CA CN CZ EE FI GE HU IL IS JP KG  
 KP KR KZ LK LR LS LT LV MD MG MK MN MX NO NZ PL RO RU SG SI SK TJ TM TR  
 TT UA UZ VN KE LS MW SD SZ UG AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK  
 ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN  
 TD TG

Publication Language: English

Fulltext Word Count: 43247

English Abstract

The present invention is directed to the isolation and use of super-infective, tumor-specific vectors that are strains of parasites including, but not limited to, bacteria, fungi and protists. In certain embodiments, the parasites include, but are not limited to, the bacterium *Salmonella* spp., such as *Salmonella typhimurium*, the bacterium *Mycobacterium avium* and the protozoan *Leishmania amazonensis*. In other embodiments, the present invention is concerned with the isolation of super-infective, tumor-specific, suicide gene-containing strains of parasites for use in treatment of solid tumors.

French Abstract

La presente invention se rapporte a l'isolement et a l'utilisation de vecteurs specifiques de tumeurs et extremement infectieux, lesquels sont des souches de parasites comprenant de facon non limitative des bacteries, des champignons et des protistes. Dans certains modes de realisation, ces parasites comprennent, egalement de facon non limitative, la bacterie *Salmonella* spp., telle que *Salmonella*

typhimurium, la bacterie Mycobacterium avium et le protozoaire Leishmania amazonensis. Dans d'autres modes de réalisation, la presente invention concerne l'isolement de souches de parasites, lesquelles sont specifiques des tumeurs et extremement infectieuses, contiennent des genes suicides et sont utiles dans le traitement de tumeurs solides.

19/3,AB/2 (Item 1 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2003 BIOSIS. All rts. reserv.

10961717 BIOSIS NO.: 199799582862  
An NaCl-sensitive %Listeria% monocytogenes mutant is defective in a DegP ( %HtrA%) homolog.  
AUTHOR: Bayles D O; Wilkinson B J  
AUTHOR ADDRESS: Ill. State Univ., Normal, IL\*\*USA  
JOURNAL: Abstracts of the General Meeting of the American Society for Microbiology 97 (0):p363 1997  
CONFERENCE/MEETING: 97th General Meeting of the American Society for Microbiology Miami Beach, Florida, USA May 4-8, 1997  
ISSN: 1060-2011  
RECORD TYPE: Citation  
LANGUAGE: English  
1997

*X requested*

19/3,AB/3 (Item 1 from file: 98)  
DIALOG(R)File 98:General Sci Abs/Full-Text  
(c) 2003 The HW Wilson Co. All rts. reserv.

03051075 H.W. WILSON RECORD NUMBER: BGSI95051075  
How Salmonella survive against the odds.  
Foster, John W  
Spector, Michael P  
Annual Review of Microbiology (Annu Rev Microbiol) v. 49 ('95) p. 145-74  
DOCUMENT TYPE: Feature Article  
SPECIAL FEATURES: bibl il ISSN: 0066-4227  
LANGUAGE: English  
COUNTRY OF PUBLICATION: United States  
WORD COUNT: 14614

ABSTRACT: The enteric pathogen Salmonella typhimurium faces daunting odds during its voyages in the natural environment and through an infected host. It must manage stresses ranging from feast to famine, acid to base, and high to low osmolarity, among others, as well as counter various types of oxidative stress and a variety of antimicrobial peptides. The defenses used to survive these encounters can be specific or can provide cross protection to a variety of hostile conditions. Once inside a host, Salmonella spp. escape the extracellular environment and thus humoral immunity by invading professional and nonprofessional phagocytes in which a new set of challenges await. Some of these stresses are similar to those encountered in the natural environment (e.g. acid, starvation) but the bacterial response is complicated by the simultaneous occurrence of multiple stresses. S. typhimurium appears to sense various in vivo cues and responds by seducing the host signal-transduction pathways that are required to phagocytize the bacterial cell. The pathogen then calls upon components of its stress-response arsenal to survive the intracellular environment. These survival strategies enable the organism to persist in nature, where conditions are usually suboptimal and equip the bacterium with pathogenic properties that, if successful, will provide it with a very rich and stress-free growth environment, a dead host. Reprinted by permission of the publisher.  
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et	Items	Description
S1	2151	HTRA
S2	192	S1 AND GRAM (1W) POSITIVE
S3	155	RD (unique items)
S4	12	S3 AND LACTOBACILLUS
S5	12	RD (unique items)
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S8	124	S3 AND STREPTOCOCCUS
S9	124	RD (unique items)
S10	124	S9 AND HTRA
S11	101	S10 AND MUTANT
S12	10	S11 NOT PY>1998
S13	92	S3 AND STAPHYLOCOCCUS
S14	92	RD (unique items)
S15	6	S14 NOT PY>1998
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S7	12	RD (unique items)
S8	124	S3 AND STREPTOCOCCUS
S9	124	RD (unique items)
S10	124	S9 AND HTRA
S11	101	S10 AND MUTANT
S12	10	S11 NOT PY>1998
S13	92	S3 AND STAPHYLOCOCCUS
S14	92	RD (unique items)
S15	6	S14 NOT PY>1998

? t s15/3,ab/1-6

>>>No matching display code(s) found in file(s): 65, 107, 128-129, 135, 225, 342, 345, 398, 449, 767

15/3,AB/1 (Item 1 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00357724

VECTORS FOR THE DIAGNOSIS AND TREATMENT OF SOLID TUMORS INCLUDING MELANOMA  
VECTEURS DESTINES AU DIAGNOSTIC ET AU TRAITEMENT DE TUMEURS SOLIDES  
NOTAMMENT DU MELANOME

Patent Applicant/Assignee:

YALE UNIVERSITY,

Inventor(s):

PAWELEK John M,

BERMUDES David,

LOW Kenneth B,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9640238 A1 19961219

Application: WO 96US10250 19960605 (PCT/WO US9610250)

Priority Application: US 95422 19950607; US 96658034 19960604

Designated States: AL AM AU AZ BB BG BR BY CA CN CZ EE FI GE HU IL IS JP KG  
KP KR KZ LK LR LS LT LV MD MG MK MN MX NO NZ PL RO RU SG SI SK TJ TM TR  
TT UA UZ VN KE LS MW SD SZ UG AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK  
ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN  
TD TG

Publication Language: English

Fulltext Word Count: 43247

English Abstract

The present invention is directed to the isolation and use of super-infective, tumor-specific vectors that are strains of parasites including, but not limited to, bacteria, fungi and protists. In certain embodiments, the parasites include, but are not limited to, the bacterium *Salmonella* spp., such as *Salmonella typhimurium*, the bacterium *Mycobacterium avium* and the protozoan *Leishmania amazonensis*. In other embodiments, the present invention is concerned with the isolation of super-infective, tumor-specific, suicide gene-containing strains of parasites for use in treatment of solid tumors.

French Abstract

La presente invention se rapporte a l'isolement et a l'utilisation de vecteurs specifiques de tumeurs et extremement infectieux, lesquels sont des souches de parasites comprenant de facon non limitative des bacteries, des champignons et des protistes. Dans certains modes de realisation, ces parasites comprennent, egalement de facon non limitative, la bacterie *Salmonella* spp., telle que *Salmonella typhimurium*, la bacterie *Mycobacterium avium* et le protozoaire *Leishmania amazonensis*. Dans d'autres modes de realisation, la presente invention concerne l'isolement de souches de parasites, lesquelles sont specifiques

des tumeurs et extremement infectieuses, contiennent des genes suicides et sont utiles dans le traitement de tumeurs solides.

15/3,AB/2 (Item 2 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00350763

NUCLEOTIDE SEQUENCE OF THE HAEMOPHILUS INFLUENZAE Rd GENOME, FRAGMENTS THEREOF, AND USES THEREOF  
SEQUENCE NUCLEOTIDIQUE DU GENOME HAEMOPHILUS INFLUENZAE RD, DES FRAGMENTS DE CE DERNIER, AINSI QUE SES APPLICATIONS

Patent Applicant/Assignee:  
HUMAN GENOME SCIENCES INC,  
JOHNS HOPKINS UNIVERSITY,

Inventor(s):  
FLEISCHMANN Robert D,  
ADAMS Mark D,  
WHITE Owen,  
SMITH Hamilton O,  
VENTER J Craig,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9633276 A1 19961024  
Application: WO 96US5320 19960422 (PCT/WO US9605320)  
Priority Application: US 95426787 19950421; US 95476102 19950607; US 95487429 19950607

Designated States: AL AM AT AU AZ BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU IS JP KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG UZ VN KE LS MW SD SZ UG AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

Publication Language: English  
Fulltext Word Count: 283999

#### English Abstract

The present invention provides the sequencing of the entire genome of Haemophilus influenzae Rd, SEQ ID NO:1. The present invention further provides the sequence information stored on computer readable media, and computer-based systems and methods which facilitate its use. In addition to the entire genomic sequence, the present invention identifies over 1700 protein encoding fragments of the genome and identifies, by position relative to a unique Not I restriction endonuclease site, any regulatory elements which modulate the expression of the protein encoding fragments of the Haemophilus genome.

#### French Abstract

La presente invention porte sur le sequencage de la totalite du genome d'Haemophilus influenzae Rd, SEQ ID NO.1. Elle concerne egalement les donnees de sequencage enregistrees sur support informatique, ainsi que les systemes informatiques et les procedes facilitant son utilisation. Outre la totalite de la sequence genomique, plus de 1700 fragments a codage proteique du genome sont identifies. Est egalement identifie de par son positionnement par rapport a un site a enzyme de restriction Not I, tout element regulateur qui module l'expression des fragments a codage proteique du genome Haemophilus.

15/3,AB/3 (Item 3 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00320998

ANALOG OF HAEMOPHILUS HIN47 WITH REDUCED PROTEASE ACTIVITY  
ANALOGUE D'HAEMOPHILUS HIN47 A ACTIVITE PROTEASE REDUITE

Patent Applicant/Assignee:  
CONNAUGHT LABORATORIES LIMITED,  
LOOSMORE Sheena M,  
YANG Yan-Ping,

CHONG Pele,  
OOMEN Raymond P,  
KLEIN Michel H,  
Inventor(s):  
LOOSMORE Sheena M,  
YANG Yan-Ping,  
CHONG Pele,  
OOMEN Raymond P,  
KLEIN Michel H,  
Patent and Priority Information (Country, Number, Date):  
Patent: WO 9603506 A2 19960208  
Application: WO 95CA434 19950721 (PCT/WO CA9500434)  
Priority Application: US 94278091 19940721; US 94296149 19940826; US  
95487167 19950607  
Designated States: AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU  
JP KE KG KP KR KZ LK LR LT LU LV MD MG MN MW MX NO NZ PL PT RO RU SD SE  
SI SK TJ TT UA US VZ VN KE MW SD SZ UG AT BE CH DE DK ES FR GB GR IE IT  
LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG  
Publication Language: English  
Fulltext Word Count: 12658

English Abstract

The invention concerns isolated and purified analogs of Haemophilus influenza Hin47 protein with decreased protease activity (of less than 10 % of that of the natural protein) but preferably retaining substantially the same immunogenic properties as natural Hin47. Preferred analogs have mutations at Ser197, His91 and/or Asp121 positions and are possibly used as chimeric proteins with other immunogenic molecules. Also disclosed are nucleic acid encoding said analogs, recombinant plasmids and transformed host cells containing said modified genes, immunogenic compositions containing Hin47 analogs or their nucleic acid and their use for prophylactic, vaccine or diagnostic purposes.

French Abstract

Analogues isolés et purifiés de la protéine Haemophilus influenzae Hin47 présentant une activité protéase réduite (inférieure à environ 10 % de celle de la protéine naturelle) et de préférence sensiblement les mêmes propriétés immunogènes que la Hin47 naturelle. Les analogues préférés présentent des mutations au niveau des positions Ser197, His91 et/ou Asp121, et peuvent être utilisés comme des protéines chimeres avec d'autres molécules immunogènes. L'invention porte également sur un acide nucléique codant lesdits analogues, des plasmides recombinés et des cellules hôtes transformées contenant ledits gènes modifiés, des compositions immunogènes comprenant les analogues de Hin47 ou leur acide nucléique ainsi que sur leur utilisation à des fins prophylactiques, diagnostiques ou de vaccination.

15/3,AB/4 (Item 1 from file: 654)  
DIALOG(R)File 654:US PAT.FULL.  
(c) FORMAT ONLY 2003 THE DIALOG CORP. All rts. reserv.

3884294

Derwent Accession: 1996-117051

Utility

CERTIFICATE OF CORRECTION

C/ Composition containing an analog of haemophilus Hin47 with reduced protease activity

Inventor: Loosmore, Sheena M., Aurora, CA  
Yang, Yan-Ping, Willowdale, CA  
Chong, Pele, Richmond Hill, CA  
Oomen, Raymond P., Schomberg, CA  
Klein, Michel H., Willowdale, CA

Assignee: Connaught Laboratories Limited (03), Willowdale, CA  
Connaught Laboratories Ltd CA (Code: 19557)

Examiner: Hendricks, Keith D. (Art Unit: 184)

Law Firm: Sim & McBurney

Publication

Application Filing

	Number	Kind	Date	Number	Date
Main Patent	US 5665353	A	19970909	US 95472173	19950607
Continuation	Pending			US 94296149	19940826
CIP	US 5506139	A		US 94278091	19940721

Disclaimer Date: 20120607

Fulltext Word Count: 9536

#### Abstract:

An isolated and purified analog of Haemophilus influenzae Hin47 protein has a decreased protease activity which is less than about 10% of that of natural Hin47 protein and preferably substantially the same immunogenic properties as natural Hin47 protein. An isolated and purified nucleic acid molecule encoding the Hin47 analog may be provided in a recombinant plasmid which may be introduced into a cell which is grown to produce the Hin47 analog. Immunogenic compositions comprising the Hin47 analog and the encoding nucleic acid may be formulated as vaccines for in vivo administration to a host, including a human, to confer protection against diseases caused by a bacterial pathogen, including Haemophilus species, such as Haemophilus influenzae, that produces Hin47 protein or a protein capable of inducing antibodies in the host specifically reactive with Hin47 protein. The Hin47 analog and the encoding nucleic acid also may be employed in diagnostic applications.

15/3,AB/5 (Item 2 from file: 654)  
 DIALOG(R)File 654:US PAT.FULL.  
 (c) FORMAT ONLY 2003 THE DIALOG CORP. All rts. reserv.

3874267

Derwent Accession: 1996-117051

Utility

C/ Analog of Haemophilus Hin47 with reduced protease activity

Inventor: Loosmore, Sheena M., Aurora, CA

Yang, Yan-Ping, Willowdale, CA

Chong, Pele, Richmond Hill, CA

Oomen, Raymond P., Schomberg, CA

Klein, Michel H., Willowdale, CA

Assignee: Connaught Laboratories Limited (03), North York

Connaught Laboratories Ltd CA (Code: 19557)

Examiner: Housel, James C. (Art Unit: 182)

Assistant Examiner: Shaver, Jennifer

Law Firm: Sim & McBurney

	Publication Number	Kind	Date	Application Number	Filing Date
Main Patent	US 5656436	A	19970812	US 95483859	19950607
Continuation	Pending			US 94296149	19940826
CIP	US 5506139	A		US 94278091	19940721

Fulltext Word Count: 9913

#### Abstract:

An isolated and purified analog of Haemophilus influenzae Hin47 protein has a decreased protease activity which is less than about 10% of that of natural Hin47 protein and preferably substantially the same immunogenic properties as natural Hin47 protein. An isolated and purified nucleic acid molecule encoding the Hin47 analog may be provided in a recombinant plasmid which may be introduced into a cell which is grown to produce the Hin47 analog. Immunogenic compositions comprising the Hin47 analog and the encoding nucleic acid may be formulated as vaccines for in vivo administration to a host, including a human, to confer protection against diseases caused by a bacterial pathogen, including Haemophilus species, such as Haemophilus influenzae, that produces Hin47 protein or a protein capable of inducing antibodies in the host specifically reactive with

Hin47 protein. The Hin47 analog and the encoding nucleic acid also may be employed in diagnostic applications.

15/3,AB/6 (Item 3 from file: 654)  
DIALOG(R) File 654:US PAT.FULL.  
(c) FORMAT ONLY 2003 THE DIALOG CORP. All rts. reserv.

3711045

Derwent Accession: 1996-117051

Utility

CERTIFICATE OF CORRECTION

C/ Analog of haemophilus Hin47 with reduced protease activity

; VACCINES, IMMUNOLOGY

Inventor: Loosmore, Sheena M., Aurora, CA

Yang, Yan-Ping, Willowdale, CA

Chong, Pele, Richmond Hill, CA

Oomen, Raymond P., Tottenham, CA

Klein, Michel H., Willowdale, CA

Assignee: Connaught Laboratories Limited (03), Willowdale, CA

Connaught Laboratories Ltd CA (Code: 19557)

Examiner: Wax, Robert A. (Art Unit: 184)

Assistant Examiner: Hendricks, Keith D.

Law Firm: Sim & McBurney

	Publication Number	Kind	Date	Application Number	Filing Date
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Main Patent	US 5506139	A	19960409	US 94278091	19940721

Fulltext Word Count: 10374

Abstract:

An isolated and purified analog of Haemophilus influenzae Hin47 protein has a decreased protease activity which is less than about 10% of that of natural Hin47 protein and preferably substantially the same immunogenic properties as natural Hin47 protein. An isolated and purified nucleic acid molecule encoding the Hin47 analog may be provided in a recombinant plasmid which may be introduced into a cell which is grown to produce the Hin47 analog. Immunogenic compositions comprising the Hin47 analog and the encoding nucleic acid may be formulated as vaccines for in vivo administration to a host, including a human, to confer protection against diseases caused by a bacterial pathogen, including Haemophilus species, such as Haemophilus influenzae, that produces Hin47 protein or a protein capable of inducing antibodies in the host specifically reactive with Hin47 protein. The Hin47 analog and the encoding nucleic acid also may be employed in diagnostic applications.

?



S2 192 S1 AND GRAM (1W) POSITIVE  
 S3 155 RD (unique items)  
 S4 12 S3 AND LACTOBACILLUS  
 S5 12 RD (unique items)  
 S6 12 S3 AND LACTOCOCCUS  
 S7 12 RD (unique items)  
 S8 124 S3 AND STREPTOCOCCUS  
 S9 124 RD (unique items)  
 S10 124 S9 AND HTRA  
 S11 101 S10 AND MUTANT  
 S12 10 S11 NOT PY>1998

? t s12/3,ab/1-10

>>>No matching display code(s) found in file(s): 65, 107, 128-129, 135,  
 225, 342, 345, 398, 449, 767

12/3,AB/1 (Item 1 from file: 440)  
 DIALOG(R)File 440:Current Contents Search(R)  
 (c) 2003 Inst for Sci Info. All rts. reserv.

10047887 References: 31

TITLE: A two-component signal transduction system essential for growth of  
 Bacillus subtilis: Implications for anti-infective therapy

AUTHOR(S): Fabret C; Hoch JA (REPRINT)

CORPORATE SOURCE: SCRIPPS CLIN & RES INST,DEPT MOL & EXPT MED, DIV CELLULAR  
 BIOL, 10550 N TORREY PINES RD/LA JOLLA//CA/92037 (REPRINT); SCRIPPS CLIN  
 & RES INST,DEPT MOL & EXPT MED, DIV CELLULAR BIOL/LA JOLLA//CA/92037

PUBLICATION TYPE: JOURNAL

PUBLICATION: JOURNAL OF BACTERIOLOGY, 1998, V180, N23 (DEC), P6375-6383

GENUINE ARTICLE#: 142TZ

PUBLISHER: AMER SOC MICROBIOLOGY, 1325 MASSACHUSETTS AVENUE, NW,  
 WASHINGTON, DC 20005-4171

ISSN: 0021-9193

LANGUAGE: English DOCUMENT TYPE: ARTICLE

ABSTRACT: A two-component signal transduction system encoded by the yycF  
 and yycG genes is part of an operon containing three genes, yycH, yycI, and  
 yycJ, with no known function and a gene, yycK, coding for an HtrA-like  
 protease. This operon was transcribed during growth, and its transcription  
 shut down as the cells approached stationary phase. This decreased  
 transcription was not Spo0A dependent. The HtrA protease gene was  
 separately controlled during sporulation from a sigma(G) promoter. Studies  
 using insertional inactivation plasmids revealed that neither yycF nor yycG  
could be inactivated, whereas the other genes were inactivated without loss  
 of viability. A temperature-sensitive YycF response regulator mutant was  
 isolated and shown to have an H215P mutation in a putative DNA-binding  
 domain which is closely related to the OmpR family of response regulators.  
 At the nonpermissive temperature, cultures of the mutant strain stopped  
 growth within 30 min, and this was followed by a decrease in optical  
 density. Microscopically, many of the cells appeared to retain their  
 structure while being empty of their contents. The essential processes  
 regulated by this two-component system remain unknown. A search of the  
 genome databases revealed YycP, YycG, and YycJ homologues encoded by three  
 linked genes in Streptococcus pyogenes. The high level of identity of  
 these proteins (71% for YycF) suggests that this system may play a similar  
 role in gram-positive pathogens.

12/3,AB/2 (Item 1 from file: 349)  
 DIALOG(R)File 349:PCT FULLTEXT  
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00441325

NUCLEIC ACID ENCODING M. TUBERCULOSIS ALGU PROTEIN  
 ACIDE NUCLEIQUE CODANT UNE PROTEINE ALGU M. TUBERCULOSIS  
 Patent Applicant/Assignee:

SCRIPTGEN PHARMACEUTICALS INC,  
 Inventor(s):

LAM Kelvin T,  
 Patent and Priority Information (Country, Number, Date):

Prt P  
 Lactobacillus

Lactococcus  
 Lactis  
 Y HRA (c1)

After  
 priority

yycK  
 mutant

Search  
 pre

Set	Items	Description
S1	2151	HTRA
S2	192	S1 AND GRAM (1W) POSITIVE
S3	155	RD (unique items)
S4	12	S3 AND LACTOBACILLUS
S5	12	RD (unique items)
S6	12	S3 AND LACTOCOCCUS
S7	12	RD (unique items)
S8	124	S3 AND STREPTOCOCCUS
S9	124	RD (unique items)
S10	124	S9 AND HTRA
S11	101	S10 AND MUTANT
S12	10	S11 NOT PY>1998
S13	92	S3 AND STAPHYLOCOCCUS
S14	92	RD (unique items)
S15	6	S14 NOT PY>1998
S16	96	S3 AND LISTERIA
S17	96	RD (unique items)
S18	96	S17 AND HTRA
S19	3	S18 NOT PY>1998
S20	9	S3 AND ENTEROCOCCUS
S21	9	RD (unique items)

? t s21/3,ab/1-9

>>>No matching display code(s) found in file(s): 65, 107, 128-129, 135, 225, 342, 345, 398, 449, 767

21/3,AB/1 (Item 1 from file: 440)

DIALOG(R)File 440:Current Contents Search(R)

(c) 2003 Inst for Sci Info. All rts. reserv.

14442617 Document Delivery Available: 000177260500036 References: 55

TITLE: The peptidyl-prolyl isomerase motif is lacking in PmpA, the prsA-like protein involved in the secretion machinery of *Lactococcus lactis*

AUTHOR(S): Drouault S; Anba J; Bonneau S; Bolotin A; Ehrlich SD; Renault P (REPRINT)

AUTHOR(S) E-MAIL: renault@jouy.inra.fr

CORPORATE SOURCE: INRA, Unite Genet Microbienne, /F-78352 Jouy En

Josas//France/ (REPRINT); INRA, Unite Genet Microbienne, /F-78352 Jouy En

Josas//France/; INRA, Unite Ecol & Physiol Syst Digest, /F-78352 Jouy En

Josas//France/

PUBLICATION TYPE: JOURNAL

PUBLICATION: APPLIED AND ENVIRONMENTAL MICROBIOLOGY, 2002, V68, N8 (AUG), P 3932-3942

GENUINE ARTICLE#: 580WV

PUBLISHER: AMER SOC MICROBIOLOGY, 1752 N ST NW, WASHINGTON, DC 20036-2904 USA

ISSN: 0099-2240

LANGUAGE: English DOCUMENT TYPE: ARTICLE

ABSTRACT: The prsA-like gene from *Lactococcus lactis* encoding its single homologue to PrsA, an essential protein triggering the folding of secreted proteins in *Bacillus subtilis*. was characterized. This gene, annotated pmpA, encodes a lipoprotein of 309 residues whose expression is increased 7- to 10-fold when (the source of nitrogen is limited. A slight increase in the expression of the PrsA-like protein (PLP) in *L. lactis* removed the degradation products previously observed with the *Staphylococcus hyicus* lipase used as a model secreted protein. This shows that PmpA either triggers the folding of the secreted lipase or activates its degradation by the cell surface protease HtrA. Unlike the case for *B. subtilis*, the inactivation of the gene encoding PmpA reduced only slightly the growth rate of *L. lactis* in standard conditions. However, it almost stopped its growth when the lipase was overexpressed in the presence of salt in the medium. Like PrsA of *B. subtilis* and PrtM of *L. lactis*, the *L. lactis* PmpA protein could thus have a foldase activity that facilitates protein secretion. These proteins belong to the third family of peptidyl-prolyl cis/trans-isomerases (PPIases) for which parvulin is the prototype. Almost all PLP from gram-positive bacteria contain a domain with the PPIase signature. An exception to this situation was found only in

Streptococcaceae, the family to which *L. lactis* belongs. PLP from *Streptococcus pneumoniae* and *Enterococcus faecalis* possess this signature, but those of *L. lactis*, *Streptococcus pyogenes*, and *Streptococcus mutans* do not. However, secondary structure predictions suggest that the folding of PLP is conserved over the entire length of the proteins, including the unconserved signature region. The activity associated with the expression of PmpA in *L. lactis* and these genomic data show that either the PPIase motif is not necessary for PPIase activity or, more likely, PmpA foldase activity does not necessarily require PPIase activity.

21/3,AB/2 (Item 2 from file: 440)  
DIALOG(R)File 440:Current Contents Search(R)  
(c) 2003 Inst for Sci Info. All rts. reserv.

12995286 References: 48

TITLE: Conserved DegP protease in gram-positive bacteria is essential for thermal and oxidative tolerance and full virulence in *Streptococcus pyogenes*

AUTHOR(S): Jones CH (REPRINT); Bolken TC; Jones KF; Zeller GO; Hruby DE

AUTHOR(S) E-MAIL: chjones@sgph.com

CORPORATE SOURCE: SIGA Technol Inc, SIGA Res Labs, 4575 SW Res Way, Suite 230/Corvallis//OR/97333 (REPRINT); SIGA Technol Inc, SIGA Res Labs, /Corvallis//OR/97333; Oregon State Univ, Dept Microbiol, /Corvallis//OR/97331

PUBLICATION TYPE: JOURNAL

PUBLICATION: INFECTION AND IMMUNITY, 2001, V69, N9 (SEP), P5538-5545

GENUINE ARTICLE#: 464PB

PUBLISHER: AMER SOC MICROBIOLOGY, 1752 N-ST NW, WASHINGTON, DC 20036-2904 USA

ISSN: 0019-9567

LANGUAGE: English DOCUMENT TYPE: ARTICLE

ABSTRACT: The DegP protease, a multifunctional chaperone and protease, has been shown to be essential for virulence in gram-negative pathogens such as *Salmonella enterica* serovar Typhimurium, *Brucella abortus*, *Yersinia enterocolitica*, and *Pseudomonas aeruginosa*. The function of DegP in pathogenesis appears to be the degradation of damaged proteins that accumulate as a result of the initial host response to infection, which includes the release of reactive oxygen intermediates. Additionally, the DegP protease plays a major role in monitoring and maintaining the *Escherichia coli* periplasm and influences *E. coli* pilus biogenesis. We report here the identification of highly homologous enzymes in *Streptococcus pyogenes*, *Streptococcus gordonii*, *Streptococcus mutans*, *Staphylococcus aureus*, and *Enterococcus faecalis*. Moreover, the phenotype of an insertionally inactivated degP allele in *S. pyogenes* is similar to that reported for *E. coli*, with temperature sensitivity for growth and enhanced sensitivity to reactive oxygen intermediates. Virulence studies in a mouse model of streptococcal infection indicate that a functional DegP protease is required for full virulence. These results suggest DegP as an attractive broad-spectrum target for future anti-infective drug development.

21/3,AB/3 (Item 1 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00901997

NUCLEIC ACIDS AND PROTEINS FROM STREPTOCOCCUS GROUPS A & B

ACIDES NUCLEIQUES ET PROTEINES DERIVES DES GROUPES DE STREPTOCOQUES A ET B

Patent Applicant/Assignee:

CHIRON S P A, Via Fiorentina, 1, I-53100 Siena, IT, IT (Residence), IT (Nationality), (For all designated states except: US)

THE INSTITUTE FOR GENOMIC RESEARCH, 9712 Medical Center Drive, Rockville, MD 20850, US, US (Residence), US (Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

TELFORD John, Chiron S.p.a, Via Fiorentina, 1, I-53100 Siena, IT, IT  
 (Residence), GB (Nationality), (Designated only for: US)  
 MASIGNANI Vega, Chiron S.p.a, Via Fiorentina, 1, I-53100 Siena, IT, IT  
 (Residence), IT (Nationality), (Designated only for: US)  
 MARGARIT Y ROS Immaculada, Chiron S.p.a, Via Fiorentina, 1, I-53100 Siena  
 , IT, IT (Residence), IT (Nationality), (Designated only for: US)  
 GRANDI Guido, Chiron S.p.a, Via Fiorentina, 1, I-53100 Siena, IT, IT  
 (Residence), IT (Nationality), (Designated only for: US)  
 FRASER CLAIRE, The Institute for Genomic Research, 9712 Medical Center  
 Drive, Rockville, MD 20850, US, US (Residence), US (Nationality),  
 (Designated only for: US)  
 TETTELIN Herve, The Institute for Genomic Research, 9712 Medical Center  
 Drive, Rockville, MD 20850, US, US (Residence), BE (Nationality),  
 (Designated only for: US)  
 Legal Representative:  
 HALLYBONE Huw George (et al) (agent), Carpmals & Ransford, 43 Bloomsbury  
 Square, London WC1A 2RA, GB,  
 Patent and Priority Information (Country, Number, Date):  
 Patent: WO 200234771 A2-A3 20020502 (WO 0234771)  
 Application: WO 2001GB4789 20011029 (PCT/WO GB0104789)  
 Priority Application: GB 200026333 20001027; GB 200028727 20001124; GB  
 20015640 20010307  
 Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
 CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP  
 KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO  
 RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW  
 (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
 (OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
 (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
 (EA) AM AZ BY KG KZ MD RU TJ TM  
 Publication Language: English  
 Filing Language: English  
 Fulltext Word Count: 1058437

#### English Abstract

The invention provides proteins from group B streptococcus (*Streptococcus agalactiae*) and group A streptococcus (*Streptococcus pyogenes*), including amino acid sequences and the corresponding nucleotide sequences. Data are given to show that the proteins are useful antigens for vaccines, immunogenic compositions, and/or diagnostics. The proteins are also targets for antibiotics.

#### French Abstract

Cette invention se rapporte a des proteines derivees du streptocoque de groupe B (*Streptococcus agalactiae*) et du streptocoque de groupe A (*Streptococcus pyogenes*), y compris des sequences d'acides amines et les sequences de nucleotides correspondantes. On produit des donnees qui montrent que ces proteines constituent des antigenes utiles pour des vaccins, des compositions immunogenes et/ou des diagnostics. Ces proteines constituent egalement des cibles pour des antibiotiques.

21/3,AB/4 (Item 2 from file: 349)  
 DIALOG(R)File 349:PCT FULLTEXT  
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00845150

LACTOCOCCUS LACTIS GENOME, POLYPEPTIDES AND USES  
 GENOME DE LACTOCOCCUS LACTIS, POLYPEPTIDES ET UTILISATIONS  
 Patent Applicant/Assignee:

INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE, 145, rue de l'Universite,  
 F-75007 Paris, FR, FR (Residence), FR (Nationality), (For all  
 designated states except: US)

Patent Applicant/Inventor:

BOLOTINE Alexandre, 5, rue du Marechal Gallieni, F-54000 Nancy, FR, FR  
 (Residence), RU (Nationality), (Designated only for: US)  
 SOROKINE Alexei, 8, Residence des Quinquonces, F-91190 Gif-sur-Yvette, FR  
 , FR (Residence), RU (Nationality), (Designated only for: US)  
 RENAULT Pierre, 9, rue Magellan, Residence les Arcades, F-78180 Montigny

le Bretonneux, FR, FR (Residence), FR (Nationality), (Designated only for: US)  
EHRLICH Stanislav Dusko, 38, rue de Campo Formio, F-75013 Paris, FR, FR  
(Residence), FR (Nationality), (Designated only for: US)  
Legal Representative:  
MARTIN Jean-Jacques (et al) (agent), Cabinet Regimbeau, 20, rue de  
Chazelles, F-75847 Paris Cedex 17, FR,  
Patent and Priority Information (Country, Number, Date):  
Patent: WO 200177334 A2-A3 20011018 (WO 0177334)  
Application: WO 2001FR1103 20010411 (PCT/WO FR0101103)  
Priority Application: FR 20004630 20000411  
Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR  
KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE  
SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM  
Publication Language: French  
Filing Language: French  
Fulltext Word Count: 66071

#### English Abstract

The invention concerns the genome sequence and nucleotide sequences of *Lactococcus lactis* IL1403. The invention also concerns polypeptides of said organism, in particular cell envelope polypeptides, polypeptides involved in different metabolism cycles, resistance to phages or stress, or still secreted polypeptides. The invention further concerns the use of said sequences, and different tools for identifying *L. lactis* or associated species. Finally the invention concerns *L. lactis* strains modified so as to increase their industrial properties.

#### French Abstract

La presente invention concerne la sequence genomique et des sequences nucleotidiques de *Lactococcus lactis* IL1403. L'invention a egalement pour objet les polypeptides de cet organisme, en particulier les polypeptides d'enveloppe cellulaire, ou impliquees dans les differents cycles de metabolisme, la resistance aux phages ou au stress, ou encore secretees. L'invention concerne aussi les utilisations des sequences decrites, ainsi que differents outils permettant l'identification de *L. lactis* ou especes associees. L'invention concerne aussi des souches de *L. lactis* modifiees afin d'en augmenter les capacites industrielles.

21/3,AB/5 (Item 3 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00798485

VACCINE COMPOSITIONS  
COMPOSITIONS DE VACCIN

Patent Applicant/Assignee:

ADVANCED MICROBIAL SOLUTIONS CORPORATION, 100 Inman Street, Cambridge, MA  
02139, US, US (Residence), US (Nationality), (For all designated states  
except: US)

Patent Applicant/Inventor:

MURPHY John R, 130 Appleton Street, Boston, MA 02116, US, US (Residence),  
US (Nationality), (Designated only for: US)

O'LEAR Edward, 153 Spindle Hill Road, Wolcott, CT 06716, US, US  
(Residence), US (Nationality), (Designated only for: US)

HARRISON Robert J, 31 Green Street, Medfield, MA 02052, US, US  
(Residence), US (Nationality), (Designated only for: US)

Legal Representative:

FOLEY Shawn P (et al) (agent), Lerner, David, Littenberg, Krumholz &  
Mentlik, LLP, 600 South Avenue West, Westfield, NJ 07090-1497, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200130384 A1 20010503 (WO 0130384)

Application: WO 2000US29231 20001023 (PCT/WO US0029231)

Priority Application: US 99161193 19991022; US 99161292 19991025  
Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ  
DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ  
LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG  
SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE  
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM  
Publication Language: English  
Filing Language: English  
Fulltext Word Count: 12784

English Abstract

Disclosed are virulent or opportunistic prokaryotes in which metal ion-dependent gene regulation confers a growth or an infectious advantage. The prokaryote contains a DNA molecule containing a sequence encoding a dominant, metal ion-independent repressor protein or a partially metal ion independent repressor protein. The prokaryotes are formulated into vaccine compositions and administered to a human or other animal to enhance protective immunity against infectious diseases caused by prokaryotes in which metal ion-dependent gene regulation confers a growth or an infectious advantage.

French Abstract

La presente invention concerne des procaryotes virulents ou opportunistes dans lesquels la regulation de gene dependant d'ion metallique confere un avantage en matiere de croissance ou d'infection. Le procaryote contient une molecule d'ADN qui contient une sequence codante pour un repressur independant d'ion metallique ou pour un repressur partiellement independant d'ion metallique. Ces procaryotes sont prepares en compositions de vaccin et administres a une personne ou a un animal de facon a renforcer l'immunité contre les infections et les maladies causees par des procaryotes dans lesquels la regulation de gene dependant d'ions metalliques confere un avantage en matiere de croissance ou d'infection.

21/3,AB/6 (Item 4 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT  
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00575936  
%GRAM%-%POSITIVE% BACTERIA DEPRIVED OF %HtrA% PROTEASIC ACTIVITY AND THEIR  
USES  
BACTERIES A GRAM POSITIF DEPOURVUES D'ACTIVITE PROTEASIQUE %HtrA%, ET LEURS  
UTILISATIONS

Patent Applicant/Assignee:

INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE,  
POQUET Isabelle,  
GRUSS Alexandra,  
BOLOTINE Alexandre,  
SOROKINE Alexei,

Inventor(s):

POQUET Isabelle,  
GRUSS Alexandra,  
BOLOTINE Alexandre,  
SOROKINE Alexei,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200039309 A1 20000706 (WO 0039309)  
Application: WO 99FR3270 19991223 (PCT/WO FR9903270)  
Priority Application: FR 9816462 19981224

Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK  
DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ  
TM TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ TZ UG ZW AM  
AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL  
PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

Publication Language: French

Fulltext Word Count: 9474

English Abstract

The invention concerns bacteria strains, obtained from %gram%-positive% bacteria whereof the genome size is not more than 3.2 Mb, and wherein the %HtrA% surface protease is inactive. Said strains are useful for expressing exported proteins of interest.

French Abstract

L'invention concerne des souches bacteriennes, obtenues a partir de bacteries a gram-positif dont la taille du genome est au plus egale a 3,2 Mb, et dans lesquelles la protease de surface %HtrA% est inactive. Ces souches sont utilisables pour l'expression de proteines d'interet exportees.

21/3,AB/7 (Item 5 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT  
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00429225

NOVEL CODING SEQUENCES

NOUVELLES SEQUENCES CODANTES

Patent Applicant/Assignee:

SMITHKLINE BEECHAM CORPORATION,  
SMITHKLINE BEECHAM PLC,  
BLACK Michael Terance,  
HODGSON John Edward,  
KNOWLES David Justin Charles,  
LONETTO Michael Arthur,  
NICHOLAS Richard Oakley,  
REID Robert H Jr,  
ZARFOS Phillip N,

Inventor(s):

BLACK Michael Terance,  
HODGSON John Edward,  
KNOWLES David Justin Charles,  
LONETTO Michael Arthur,  
NICHOLAS Richard Oakley,  
REID Robert H Jr,  
ZARFOS Phillip N,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9819689 A1 19980514  
Application: WO 97US19226 19971027 (PCT/WO US9719226)  
Priority Application: US 9629930 19961101

Designated States: CA JP US AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT  
SE

Publication Language: English

Fulltext Word Count: 22154

English Abstract

This invention relates to newly identified Streptococcal polynucleotides, polypeptides encoded by such polynucleotides, the uses of such polynucleotides and polypeptides, as well as the production of such polynucleotides and polypeptides and recombinant host cells transformed with the polynucleotides. This invention also relates to inhibiting the biosynthesis or action of such polynucleotides or polypeptides and to the use of such inhibitors in therapy.

French Abstract

L'invention concerne des polynucleotides de streptocoque nouvellement identifies, des polypeptides codes par ces polynucleotides, l'utilisation et la fabrication desdits polypeptides et polynucleotides ainsi que des cellules de recombinaison transformees avec lesdits polynucleotides. L'invention concerne egalement l'inhibition de la biosynthese ou de l'action desdits polypeptides ou polynucleotides, ainsi que l'utilisation therapeutique des inhibiteurs obtenus.

21/3,AB/8 (Item 6 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT  
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00350763

NUCLEOTIDE SEQUENCE OF THE HAEMOPHILUS INFLUENZAE Rd GENOME, FRAGMENTS  
THEREOF, AND USES THEREOF  
SEQUENCE NUCLEOTIDIQUE DU GENOME HAEMOPHILUS INFLUENZAE RD, DES FRAGMENTS  
DE CE DERNIER, AINSI QUE SES APPLICATIONS

Patent Applicant/Assignee:

HUMAN GENOME SCIENCES INC,  
JOHNS HOPKINS UNIVERSITY,

Inventor(s):

FLEISCHMANN Robert D,  
ADAMS Mark D,  
WHITE Owen,  
SMITH Hamilton O,  
VENTER J Craig,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9633276 A1 19961024

Application: WO 96US5320 19960422 (PCT/WO US9605320)

Priority Application: US 95426787 19950421; US 95476102 19950607; US  
95487429 19950607

Designated States: AL AM AT AU AZ BB BG BR BY CA CH CN CZ DE DK EE ES FI GB

GE HU IS JP KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL

PT RO RU SD SE SG SI SK TJ TM TR TT UA UG UZ VN KE LS MW SD SZ UG AM AZ

BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE

BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 283999

#### English Abstract

The present invention provides the sequencing of the entire genome of Haemophilus influenzae Rd, SEQ ID NO:1. The present invention further provides the sequence information stored on computer readable media, and computer-based systems and methods which facilitate its use. In addition to the entire genomic sequence, the present invention identifies over 1700 protein encoding fragments of the genome and identifies, by position relative to a unique Not I restriction endonuclease site, any regulatory elements which modulate the expression of the protein encoding fragments of the Haemophilus genome.

#### French Abstract

La presente invention porte sur le sequencage de la totalite du genome d'Haemophilus influenzae Rd, SEQ ID NO.1. Elle concerne egalement les donnees de sequencage enregistrees sur support informatique, ainsi que les systemes informatiques et les procedes facilitant son utilisation. Outre la totalite de la sequence genomique, plus de 1700 fragments a codage proteique du genome sont identifies. Est egalement identifie de par son positionnement par rapport a un site a enzyme de restriction Not I, tout element regulateur qui module l'expression des fragments a codage proteique du genome Haemophilus.

21/3,AB/9 (Item 1 from file: 399)  
DIALOG(R) File 399:CA SEARCH(R)  
(c) 2003 American Chemical Society. All rts. reserv.

133085092 CA: 133(7)85092u PATENT

Gram-positive bacteria deficient in the htrA proteinase involved in the degradation of secreted proteins and their uses

INVENTOR(AUTHOR): Poquet, Isabelle; Gruss, Alexandra; Bolotine, Alexandre  
; Sorokine, Alexei

LOCATION: Fr.

ASSIGNEE: Institut National de la Recherche Agronomique

PATENT: PCT International ; WO 200039309 A1 DATE: 20000706

APPLICATION: WO 99FR3270 (19991223) \*FR 9816462 (19981224)

PAGES: 43 pp. CODEN: PIXXD2 LANGUAGE: French CLASS: C12N-015/57A;  
C12N-009/52B; C12R-001/225B DESIGNATED COUNTRIES: AE; AL; AM; AT; AU; AZ;



BA; BB; BG; BR; BY; CA; CH; CN; CR; CU; CZ; DE; DK; DM; EE; ES; FI; GB; GD;  
GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS;  
LT; LU; LV; MA; MD; MG; MK; MN; MW; MX; NO; NZ; PL; PT; RO; RU; SD; SE; SG;  
SI; SK; SL; TJ; TM; TR; TT; TZ; UA; UG; US; UZ; VN; YU; ZA; ZW; AM; AZ; BY;  
KG; KZ; MD; RU; TJ; TM DESIGNATED REGIONAL: GH; GM; KE; LS; MW; SD; SL; SZ  
; TZ; UG; ZW; AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LU; MC;  
NL; PT; SE; BF; BJ; CF; CG; CI; CM; GA; GN; GW; ML; MR; NE; SN; TD; TG  
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>>>Duplicate detection is not supported for File 398.

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>>>No matching display code(s) found in file(s): 398

1/3,AB/1 (Item 1 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00575936

GRAM-POSITIVE BACTERIA DEPRIVED OF HtrA PROTEASIC ACTIVITY AND THEIR USES  
BACTERIES A GRAM POSITIF DEPOURVUES D'ACTIVITE PROTEASIQUE HtrA, ET LEURS  
UTILISATIONS

Patent Applicant/Assignee:

INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE,  
POQUET Isabelle,  
GRUSS Alexandra,  
BOLOTINE Alexandre,  
SOROKINE Alexei,

Inventor(s):

POQUET Isabelle,  
GRUSS Alexandra,  
BOLOTINE Alexandre,  
SOROKINE Alexei,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200039309 A1 20000706 (WO 0039309)

Application: WO 99FR3270 19991223 (PCT/WO FR9903270)

Priority Application: FR 9816462 19981224

Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK

DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR

LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ

TM TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ TZ UG ZW AM

AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL

PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

Publication Language: French

Fulltext Word Count: 9474

English Abstract

The invention concerns bacteria strains, obtained from gram-positive bacteria whereof the genome size is not more than 3.2 Mb, and wherein the HtrA surface protease is inactive. Said strains are useful for expressing exported proteins of interest.

French Abstract

L'invention concerne des souches bacteriennes, obtenues a partir de bacteries a gram-positif dont la taille du genome est au plus egale a 3,2 Mb, et dans lesquelles la protease de surface HtrA est inactive. Ces souches sont utilisables pour l'expression de proteines d'interet exportees.

1/3,AB/2 (Item 2 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00428468

STREPTOCOCCUS PNEUMONIAE POLYNUCLEOTIDES AND SEQUENCES  
POLYNUCLEOTIDES ET SEQUENCES DE STREPTOCOCCUS PNEUMONIAE

Patent Applicant/Assignee:

HUMAN GENOME SCIENCES INC,  
KUNSCH Charles A,  
CHOI Gil H,  
DILLON Patrick J,  
ROSEN Craig A,

BARASH Steven C,  
FANNON Michael,  
DOUGHERTY Brian A,

Inventor(s):

KUNSCH Charles A,  
CHOI Gil H,  
DILLON Patrick J,  
ROSEN Craig A,  
BARASH Steven C,  
FANNON Michael,  
DOUGHERTY Brian A,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9818931 A2 19980507  
Application: WO 97US19588 19971030 (PCT/WO US9719588)  
Priority Application: US 9629960 19961031

Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES

FI GB GE GH HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK  
MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN  
YU ZW GH KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK  
ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN  
TD TG

Publication Language: English

Fulltext Word Count: 330745

English Abstract

The present invention provides polynucleotide sequences of the genome of *Streptococcus pneumoniae*, polypeptide sequences encoded by the polynucleotide sequences, corresponding polynucleotides and polypeptides, vectors and hosts comprising the polynucleotides, and assays and other uses thereof. The present invention further provides polynucleotide and polypeptide sequence information stored on computer readable media, and computer-based systems and methods which facilitate its use.

French Abstract

L'invention concerne des sequences polynucleotidiques du genome de *Streptococcus pneumoniae*, des sequences polypeptidiques codees par lesdites sequences polynucleotidiques, les polynucleotides et les polypeptides correspondants, des vecteurs et des hotes contenant les polynucleotides, ainsi que des analyses et autres utilisations. Elle concerne en outre des informations sur les sequences polynucleotidiques et polypeptidiques mises en memoire sur des supports lisibles par un ordinateur, ainsi que des systemes et des methodes informatisees facilitant leur utilisation.

1/3,AB/3 (Item 1 from file: 398)

DIALOG(R)File 398:CHEMSEARCH(TM)

(c) 2003 AMER.CHEM.SOC. All rts. reserv.

CAS REGISTRY NUMBER: 205395-97-7

MOLECULAR FORMULA: Unknown

CA NAME(S):

HP=Proteinase, serine (*Streptococcus pneumoniae* strain R801 gene htrA)  
(9CI)

SYNONYMS: Protein (*Streptococcus pneumoniae*); Serine protease

(*Streptococcus pneumoniae* strain R6 gene sphtra); Serine protease  
(*Streptococcus pneumoniae* strain R801 gene htrA); 114: PN: WO0006738

TABLE: 1 claimed protein

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>>>No matching display code(s) found in file(s): 398

2/3,AB/1 (Item 1 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2003 BIOSIS. All rts. reserv.

12400758 BIOSIS NO.: 200000154260  
Expression of ykdA, encoding a Bacillus subtilis homologue of HtrA, is heat shock inducible and negatively autoregulated.  
AUTHOR: Noone David; Howell Alistair; Devine Kevin M(a)  
AUTHOR ADDRESS: (a)Department of Genetics, Smurfit Institute, Trinity College, Dublin, 2\*\*Ireland  
JOURNAL: Journal of Bacteriology. 182 (6):p1592-1599 March, 2000  
ISSN: 0021-9193  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: English  
SUMMARY LANGUAGE: English

ABSTRACT: There are three members of the HtrA family of serine proteases, YkdA, YvtA, and YyxA, encoded in the chromosome of Bacillus subtilis. In this study, we report on the promoter structure and regulation of ykdA expression. The ykdA gene is heat inducible, exhibiting a biphasic pattern of expression during a 60-min interval after heat shock. Increased expression after heat shock occurs at the transcriptional level. The heat-shock-inducible promoter has a single mismatch with a SigA-type - 10 motif, but does not exhibit similarity to a SigA - 35 region. There are six octamer repeats with a consensus TTTTCACA positioned at, and upstream of, the normal position of a - 35 region. While repeats V and VI appear dispensable, repeat IV is essential for normal thermoinducible expression. This promoter structure is also found in the control region of yvtA, encoding a second member of this family of proteases. Expression of ykdA is negatively autoregulated both during the growth cycle and during heat shock. Our evidence suggests that YkdA protease activity is not required for this form of regulation. Null mutants of ykdA display increased tolerance to heat and are 80-fold more resistant to 10 mM hydrogen peroxide than wild-type cells. However, ykdA expression is not induced by hydrogen peroxide. These results indicate that the regulon to which YkdA belongs is linked to the oxidative stress response in B. subtilis.

2000

2/3,AB/2 (Item 2 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2003 BIOSIS. All rts. reserv.

11192405 BIOSIS NO.: 199799813550  
Sequencing of regions downstream of addA (98 degrees) and citG (289 degrees) in Bacillus subtilis.  
AUTHOR: Medina N; Vannier F; Roche B; Autret S; Levine A; Seror S J(a)  
AUTHOR ADDRESS: (a)Inst. Genetique Microbiol., URA CNRS 2225, Univ. Paris XI, Batiment 409, 91405 Orsay Cedex\*\*France  
JOURNAL: Microbiology (Reading) 143 (10):p3305-3308 1997  
ISSN: 1350-0872  
RECORD TYPE: Abstract  
LANGUAGE: English

ABSTRACT: The nucleotide sequence of 17-3 kbp downstream of addA (980) on

the *Bacillus subtilis* chromosome was determined. Twenty putative ORFs were identified. Three of them coincided with known *B. subtilis* genes, *addA*, *sbcD* and *wprA*. The product of four other ORFs showed similarity to *SbcC* of *Clostridium perfringens*, *CotH* of *B. subtilis*, 2-hydroxyhepta-2,4-diene-1,7-diolate isomerase of *Methanococcus jannaschii* and a putative ORF of *Pseudomonas syringae*. In addition, a sequence of 7.6 kbp downstream of *dtG* (1890) was analysed. Among 10 putative ORFs identified, two coincided with known genes, *dtG* and *mrgA*, whilst three showed homology with X86780, a sensory protein kinase of *Streptomyces hygroscopicus*, an alkaline phosphatase regulatory protein and a hypothetical protease, %YyxA%, of *B. subtilis*.

1997

2/3,AB/3 (Item 1 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2003 WIPO/Univentio. All rts. reserv.

00575936

GRAM-POSITIVE BACTERIA DEPRIVED OF HtrA PROTEASIS ACTIVITY AND THEIR USES  
BACTERIES A GRAM POSITIF DEPOURVUES D'ACTIVITE PROTEASIQUE HtrA, ET LEURS  
UTILISATIONS

Patent Applicant/Assignee:

INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE,  
POQUET Isabelle,  
GRUSS Alexandra,  
BOLOTINE Alexandre,  
SOROKINE Alexei,

Inventor(s):

POQUET Isabelle,  
GRUSS Alexandra,  
BOLOTINE Alexandre,  
SOROKINE Alexei,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200039309 A1 20000706 (WO 0039309)  
Application: WO 99FR3270 19991223 (PCT/WO FR9903270)  
Priority Application: FR 9816462 19981224

Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK  
DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ  
TM TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ TZ UG ZW AM  
AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL  
PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

Publication Language: French

Fulltext Word Count: 9474

English Abstract

The invention concerns bacteria strains, obtained from gram-positive bacteria whereof the genome size is not more than 3.2 Mb, and wherein the HtrA surface protease is inactive. Said strains are useful for expressing exported proteins of interest.

French Abstract

L'invention concerne des souches bacteriennes, obtenues a partir de bacteries a gram-positif dont la taille du genome est au plus egale a 3,2 Mb, et dans lesquelles la protease de surface HtrA est inactive. Ces souches sont utilisables pour l'expression de proteines d'interet exportees.

2/3,AB/4 (Item 1 from file: 398)  
DIALOG(R)File 398:CHEMSEARCH(TM)  
(c) 2003 AMER.CHEM.SOC. All rts. reserv.

CAS REGISTRY NUMBER: 192007-85-5

MOLECULAR FORMULA: Unknown

CA NAME(S):

HP=Protein (*Bacillus subtilis* strain 168 clone D10 gene *yyxK*) (9CI)



SYNONYMS: Protein (Bacillus subtilis gene yyxA)  
?

S2 9 RD (unique items)  
? ds  
Set Items Description  
S1 29 YKDA  
S2 9 RD (unique items)  
? t s2/3,ab/1-9  
>>>No matching display code(s) found in file(s): 398

2/3,AB/1 (Item 1 from file: 440)  
DIALOG(R)File 440:Current Contents Search(R)  
(c) 2003 Inst for Sci Info. All rts. reserv.

12293823 References: 18  
TITLE: %YkdA% and YvtA, HtrA-like serine proteases in *Bacillus subtilis*, engage in negative autoregulation and reciprocal cross-regulation of %ykdA% and yvtA gene expression  
AUTHOR(S): Noone D; Howell A; Collery R; Devine KM (REPRINT)  
AUTHOR(S) E-MAIL: kdevine@tcd.ie  
CORPORATE SOURCE: Univ Dublin Trinity Coll, Dept Genet, /Dublin 2//Ireland/ (REPRINT); Univ Dublin Trinity Coll, Dept Genet, /Dublin 2//Ireland/; Univ Dublin Trinity Coll, Natl Pharmaceut Biotechnol Ctr, /Dublin 2//Ireland/  
PUBLICATION TYPE: JOURNAL  
PUBLICATION: JOURNAL OF BACTERIOLOGY, 2001, V183, N2 (JAN), P654-663  
GENUINE ARTICLE#: 387KJ  
PUBLISHER: AMER SOC MICROBIOLOGY, 1752 N ST NW, WASHINGTON, DC 20036-2904 USA  
ISSN: 0021-9193  
LANGUAGE: English DOCUMENT TYPE: ARTICLE

ABSTRACT: HtrA-type serine proteases participate in folding and degradation of aberrant proteins and in processing and maturation of native proteins. Mutation of the corresponding genes often confers a pleiotropic phenotype that can include temperature sensitivity, sensitivity to osmotic and oxidative stress, and attenuated virulence. There are three HtrA-type serine proteases, %YkdA%, YvtA, and YycK, encoded in the *Bacillus subtilis* genome. In this report we show that %YkdA% and YvtA display many similarities: their expression profiles during the growth cycle in wild type and mutant backgrounds are very alike, with expression being directed by very similar promoters. Both are induced by temperature upshift and by heterologous amylases at the transition phase of the growth cycle. These characteristics are quite different for YycK, suggesting that it has a cellular function distinct from that of the other two proteases or that it performs the same function but under different conditions. We also show that inactivation of either %ykdA% or yvtA results in compensating overexpression of the other gene, especially during stress conditions, with a concomitant increase in resistance to heat and hydrogen peroxide stresses. Mutation of both %ykdA% and yvtA leads to growth defects and to thermosensitivity. The fact that their expression increases dramatically at the transition phase of the growth cycle under certain conditions suggests that the %YkdA% and YvtA proteases may function in the processing, maturation, or secretion of extracellular enzymes in *B. subtilis*.

2/3,AB/2 (Item 2 from file: 440)  
DIALOG(R)File 440:Current Contents Search(R)  
(c) 2003 Inst for Sci Info. All rts. reserv.

11403415 References: 45  
TITLE: Expression of %ykdA%, encoding a *Bacillus subtilis* homologue of HtrA, is heat shock inducible and negatively autoregulated  
AUTHOR(S): Noone D; Howell A; Devine KM (REPRINT)  
AUTHOR(S) E-MAIL: kdevine@tcd.ie  
CORPORATE SOURCE: Trinity Coll, Dept Genet, /Dublin 2//Ireland/ (REPRINT); Trinity Coll, Dept Genet, /Dublin 2//Ireland/; Trinity Coll, Natl Pharmaceut Biotechnol Ctr, /Dublin 2//Ireland/  
PUBLICATION TYPE: JOURNAL  
PUBLICATION: JOURNAL OF BACTERIOLOGY, 2000, V182, N6 (MAR), P1592-1599

GENUINE ARTICLE#: 288VK  
PUBLISHER: AMER SOC MICROBIOLOGY, 1325 MASSACHUSETTS AVENUE, NW,  
WASHINGTON, DC 20005-4171 USA  
ISSN: 0021-9193  
LANGUAGE: English DOCUMENT TYPE: ARTICLE

ABSTRACT: There are three members of the HtrA family of serine proteases, %YkdA%, YvtA, and YyxA, encoded in the chromosome of Bacillus subtilis. In this study, we report on the promoter structure and regulation of %ykdA%. expression. The %ykdA% gene is heat inducible, exhibiting a biphasic pattern of expression during a 60-min interval after heat shock. Increased expression after heat shock occurs at the transcriptional level. The heat-shock-inducible promoter has a single mismatch with a SigA-type -10 motif, but does not exhibit similarity to a SigA -35 region. There are six octamer repeats with a consensus TTTTCACA positioned at, and upstream of, the normal position of a -35 region. While repeats V and VI appear dispensable, repeat IV is essential for normal thermoinducible expression. This promoter structure is also found in the control region of yvtA, encoding a second member of this family of proteases. Expression of %ykdA% is negatively autoregulated both during the growth cycle and during heat shock. Our evidence suggests that %YkdA% protease activity is not required for this form of regulation. Null mutants of %ykdA% display increased tolerance to heat and are 80-fold more resistant to 10 mM hydrogen peroxide than wild-type cells. However, %ykdA% expression is not induced by hydrogen peroxide. These results indicate that the regulon to which %YkdA% belongs is linked to the oxidative stress response in B. subtilis.

2/3,AB/3 (Item 1 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00895082

METHODS FOR MONITORING MULTIPLE GENE EXPRESSION  
METHODES DE SURVEILLANCE DE L'EXPRESSION GENETIQUE MULTIPLE

Patent Applicant/Assignee:

NOVOZYMES BIOTECH INC, 1445 Drew Avenue, Davis, CA 95616, US, US  
(Residence), US (Nationality)

NOVOZYMES A S, Krogshoejvej 36, DK-2880 Bagsvaerd, DK, DK (Residence), DK  
(Nationality)

Inventor(s):

BERKA Randy, 3609 Modoc, Davis, CA 95616, US,  
CLAUSEN Ib Groth, Fyrrestein 6, DK-3400 Hillerod, DK,

Legal Representative:

STARNES Robert (agent), Novozymes Biotech, Inc., 1445 Drew Avenue, Davis,  
CA 95616 (et al), US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200229113 A2 20020411 (WO 0229113)

Application: WO 2001US31437 20011005 (PCT/WO US0131437)

Priority Application: US-2000680598 20001006; US 2001279526 20010327

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP  
KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU  
SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

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Publication Language: English

Filing Language: English

Fulltext Word Count: 76163

English Abstract

The present invention relates to methods for monitoring differential expression of a plurality of genes in a first Bacillus cell relative to expression of the same genes in one or more second Bacillus cells using microarrays containing Bacillus genomic sequenced tags. The present invention also relates to computer readable media and computer-based systems. The present invention further relates to substrates containing



an array of *Bacillus licheniformis* or *Bacillus clausii* GSTs.

#### French Abstract

L'invention concerne des methodes qui permettent de surveiller l'expression differentielle de plusieurs genes dans une premiere cellule *Bacillus* liee a l'expression de ces memes genes dans au moins une seconde cellule *Bacillus* au moyen de jeux ordonnes de micro-echantillons contenant des marqueurs sequences genomiques *Bacillus*. L'invention concerne egalement supports lisibles par ordinateur et des systemes informatises. L'invention concerne en outre des substrats contenant un jeu de marqueurs sequences genomiques *Bacillus licheniformis* ou *Bacillus clausii*.

2/3,AB/4 (Item 2 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00845150

LACTOCOCCUS LACTIS GENOME, POLYPEPTIDES AND USES  
GENOME DE LACTOCOCCUS LACTIS, POLYPEPTIDES ET UTILISATIONS

Patent Applicant/Assignee:

INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE, 145, rue de l'Universite,  
F-75007 Paris, FR, FR (Residence), FR (Nationality), (For all  
designated states except: US)

Patent Applicant/Inventor:

BOLOTINE Alexandre, 5, rue du Marechal Gallieni, F-54000 Nancy, FR, FR  
(Residence), RU (Nationality), (Designated only for: US)  
SOROKINE Alexei, 8, Residence des Quinquonces, F-91190 Gif-sur-Yvette, FR  
, FR (Residence), RU (Nationality), (Designated only for: US)  
RENAULT Pierre, 9, rue Magellan, Residence les Arcades, F-78180 Montigny  
le Bretonneux, FR, FR (Residence), FR (Nationality), (Designated only  
for: US)  
EHRlich Stanislav Dusko, 38, rue de Campo Formio, F-75013 Paris, FR, FR  
(Residence), FR (Nationality), (Designated only for: US)

Legal Representative:

MARTIN Jean-Jacques (et al) (agent), Cabinet Regimbeau, 20, rue de  
Chazelles, F-75847 Paris Cedex 17, FR,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200177334 A2-A3 20011018 (WO 0177334)  
Application: WO 2001FR1103 20010411 (PCT/WO FR0101103)  
Priority Application: FR 20004630 20000411

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU

CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR  
KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE

SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: French

Filing Language: French

Fulltext Word Count: 66071

#### English Abstract

The invention concerns the genome sequence and nucleotide sequences of *Lactococcus lactis* IL1403. The invention also concerns polypeptides of said organism, in particular cell envelope polypeptides, polypeptides involved in different metabolism cycles, resistance to phages or stress, or still secreted polypeptides. The invention further concerns the use of said sequences, and different tools for identifying *L. lactis* or associated species. Finally the invention concerns *L. lactis* strains modified so as to increase their industrial properties.

#### French Abstract

La presente invention concerne la sequence genomique et des sequences nucleotidiques de *Lactococcus lactis* IL1403. L'invention a egalement pour objet les polypeptides de cet organisme, en particulier les polypeptides d'enveloppe cellulaire, ou impliquees dans les differents cycles de

metabolisme, la resistance aux phages ou au stress, ou encore secretes.  
L'invention concerne aussi les utilisations des sequences decrites, ainsi que differents outils permettant l'identification de L. lactis ou especes associees. L'invention concerne aussi des souches de L. lactis modifiees afin d'en augmenter les capacites industrielles.

2/3,AB/5 (Item 3 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2003 WIPO/Univentio. All rts. reserv.

00575936

GRAM-POSITIVE BACTERIA DEPRIVED OF HtrA PROTEASIC ACTIVITY AND THEIR USES  
BACTERIES A GRAM POSITIF DEPOURVUES D'ACTIVITE PROTEASIQUE HtrA, ET LEURS  
UTILISATIONS

Patent Applicant/Assignee:

INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE,  
POQUET Isabelle,  
GRUSS Alexandra,  
BOLOTINE Alexandre,  
SOROKINE Alexei,

Inventor(s):

POQUET Isabelle,  
GRUSS Alexandra,  
BOLOTINE Alexandre,  
SOROKINE Alexei,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200039309 A1 20000706 (WO 0039309)  
Application: WO 99FR3270 19991223 (PCT/WO FR9903270)  
Priority Application: FR 9816462 19981224

Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK  
DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ  
TM TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ TZ UG ZW AM  
AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL  
PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

Publication Language: French

Fulltext Word Count: 9474

English Abstract

The invention concerns bacteria strains, obtained from gram-positive bacteria whereof the genome size is not more than 3.2 Mb, and wherein the HtrA surface protease is inactive. Said strains are useful for expressing exported proteins of interest.

French Abstract

L'invention concerne des souches bacteriennes, obtenues a partir de bacteries a gram-positif dont la taille du genome est au plus egale a 3,2 Mb, et dans lesquelles la protease de surface HtrA est inactive. Ces souches sont utilisables pour l'expression de proteines d'interet exportees.

2/3,AB/6 (Item 1 from file: 398)  
DIALOG(R)File 398:CHEMSEARCH(TM)  
(c) 2003 AMER.CHEM.SOC. All rts. reserv.

CAS REGISTRY NUMBER: 341580-45-8

MOLECULAR FORMULA: Unknown

CA NAME(S):

HP=Protein (Lactococcus lactis lactis strain IL1403 gene ykdA) (9CI)  
SYNONYMS: Protein (Lactococcus lactis strain IL1403 gene ykdA); 1020: PN:  
W00177334 SEQID: 1021 claimed protein

2/3,AB/7 (Item 2 from file: 398)  
DIALOG(R)File 398:CHEMSEARCH(TM)  
(c) 2003 AMER.CHEM.SOC. All rts. reserv.

CAS REGISTRY NUMBER: 266330-42-1

MOLECULAR FORMULA: Unknown

CA NAME(S):

HP=DNA (Bacillus subtilis gene ykdA promoter region-containing  
fragment) (9CI)

2/3,AB/8 (Item 3 from file: 398)

DIALOG(R)File 398:CHEMSEARCH(TM)

(c) 2003 AMER.CHEM.SOC. All rts. reserv.

CAS REGISTRY NUMBER: 161108-11-8

MOLECULAR FORMULA: Unknown

CA NAME(S):

HP=Proteinase (9CI)

SB=gene degP

SYNONYMS: Gene degP proteinase; Gene degS proteinase; Gene htrA protease;

Gene htrA proteinase; Gene htrA1 proteinase; Gene PRSS11 proteinase;

HtrA serine protease; Serine protease HtrA; Serine protease YkdA;

Serine protease YvtA; Serine proteinase 11

2/3,AB/9 (Item 1 from file: 20)

DIALOG(R)File 20:Dialog Global Reporter

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23813337

Yilo Krobo District: Problems and Prospects

Stephen A. Quaye

GHANAIAN CHRONICLE (AAGM)

July 10, 2002

JOURNAL CODE: GHCH LANGUAGE: English RECORD TYPE: FULLTEXT

WORD COUNT: 873

Yilo Krobo District is one of the deprived districts in the Eastern Region where there are no employment opportunities for the people, apart from agriculture.

Because of this, most of the youth indulge in immoral activities and also migrate to cities to look for jobs which are non-existing.

?

Set	Items	Description
S1	1125	P RTP
S2	605	RD (unique items)
S3	573414	S2 AND BACTERIA OR BACTERIUM
S4	122	S3 AND S2
S5	52	S2 AND LACTIC
S6	52	RD (unique items)

? t s6/3,ab/1-52

>>>No matching display code(s) found in file(s): 65, 180, 225, 342, 398,  
515-516, 518, 810, 813

6/3,AB/1 (Item 1 from file: 440)  
DIALOG(R)File 440:Current Contents Search(R)  
(c) 2003 Inst for Sci Info. All rts. reserv.

15749892 Document Delivery Available: 000181502000007 References: 37  
TITLE: Effect of proteinases of starter bacteria on the growth and  
proteolytic activity of *Lactobacillus plantarum* DPC2741  
AUTHOR(S): Di Cagno R; De Angelis M; Upadhyay VK; McSweeney PLH; Minervini  
F; Gallo G; Gobetti M (REPRINT)  
AUTHOR(S) E-MAIL: gobetti@agr.uniba.it  
CORPORATE SOURCE: Univ Bari, Dipartimento Protez Piante & Microbiol  
Applicata, Via Amendola 165-A/I-70126 Bari//Italy/ (REPRINT); Univ Bari,  
Dipartimento Protez Piante & Microbiol Applicata, /I-70126 Bari//Italy/;  
CNR, Inst Sci Food Protect, /Bari//Italy/; Univ Perugia, Dept Food Sci,  
/I-06100 Perugia//Italy/; Univ Coll Cork, Dept Food Sci Food Technol &  
Nutr, /Cork//Ireland/  
PUBLICATION TYPE: JOURNAL  
PUBLICATION: INTERNATIONAL DAIRY JOURNAL, 2003, V13, N2-3, P145-157  
GENUINE ARTICLE#: 654NB  
PUBLISHER: ELSEVIER SCI LTD, THE BOULEVARD, LANGFORD LANE, KIDLINGTON,  
OXFORD OX5 1GB, OXON, ENGLAND  
ISSN: 0958-6946  
LANGUAGE: English DOCUMENT TYPE: ARTICLE

ABSTRACT: The effects of partially purified proteinases (%PrTP%) of  
*Streptococcus thermophilus* ST8, *Lactobacillus helveticus* PR4, *Lb.*  
*delbrueckii* subsp. *bulgaricus* B397, *Lactococcus lactis* subsp. *cremoris* ST2  
or *Brevibacterium linens* 9 on the growth and proteolytic activity of *Lb.*  
*plantarum* DPC2741 were studied. In sterile reconstituted skim milk (RSM),  
almost all the %PrTP% promoted higher cell numbers compared with the pure  
bacterial culture. The enzymes of *Lb. helveticus* PR4 and *Lc. lactis* subsp.  
*cremoris* ST2 were the most effective in increasing the maximum growth rate  
the time in which was held constant and in decreasing the lag phase of  
growth. Compared with the pure bacterial culture, higher concentrations of  
free amino acids were found when *Lb. plantarum* DPC2741 was cultivated in  
RSM with the %PrTP% of starter bacteria; the profiles of free amino acids  
and peptides depended on the type of %PrTP%. *Lb. plantarum* DPC2741 did not  
grow when alpha(S1)-, beta- or kappa-casein (CN) fractions were substituted  
for amino acids in the chemically defined medium (CDM). When %PrTP% were  
added to CDM, bacterial growth was restored to an extent that depended on  
the substrate specificity of the enzyme and CN fraction used. Experiments  
in which combinations of the three essential amino acids (Glu, Val and Ile)  
were added to CDM containing CN fractions made it possible to identify some  
amino acid deficiency which was responsible for the limited growth of *Lb.*  
*plantarum* DPC2741 in combination with %PrTP% of starter bacteria. To  
simulate cheese ripening conditions, *Lb. plantarum* DPC2741 alone and in  
combinations with %PrTP% of *Str. thermophilus* ST8, *Lb. delbrueckii* subsp.  
*bulgaricus* B397 or *Lb. helveticus* PR4 was grown into a model cows' milk  
curd system for 10 d at 12degreesC. All the %PrTP% enhanced the bacterial  
growth, increased the concentration of free amino acids and promoted  
profiles of amino acids and peptides qualitatively different. (C) 2003  
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6/3,AB/2 (Item 2 from file: 440)  
DIALOG(R)File 440:Current Contents Search(R)  
(c) 2003 Inst for Sci Info. All rts. reserv.

12532714 References: 16

TITLE: Network of regulation of gene transcription of the proteolytic system of *Lactococcus lactis*

AUTHOR(S): Guedon E; Martin C; Gobert FX; Ehrlich SD; Renault P; Delorme C (REPRINT)

AUTHOR(S) E-MAIL: delorme@biotec.jouy.inra.fr

CORPORATE SOURCE: INRA, Lab Genet Microbienne, Domaine de Vilvert/F-78352 Jouy En Josas//France/ (REPRINT); INRA, Lab Genet Microbienne, /F-78352 Jouy En Josas//France/

PUBLICATION TYPE: JOURNAL

PUBLICATION: LAIT, 2001, V81, N1-2 (JAN-APR), P65-74

GENUINE ARTICLE#: 412HX

PUBLISHER: E D P SCIENCES, 7, AVE DU HOGGAR, PARC D ACTIVITES COURTABOEUF, BP 112, F-91944 LES ULIS CEDEXA, FRANCE

ISSN: 0023-7302

LANGUAGE: French DOCUMENT TYPE: ARTICLE

ABSTRACT: The proteolytic system of lactococci that allows degradation of caseins and proteins of milk is complex. Milk proteins contain all amino acids necessary for growth of lactic acid bacteria. The proteolytic system consists of an extracellularly located proteinase, transport systems for di-tripeptides and oligopeptides and a multitude of intracellular peptidases. Expression of 13 genes was followed by transcriptional fusions in presence of different peptide sources. Transcription of 6 genes is repressed in media containing peptides and that of 4 genes (pepN, pepC, prtP and opp-pepO1 operon) by dipeptides containing one of the 3 branched amino acids (isoleucine, leucine and valine). Repression of gene transcription required that regulatory peptides are translocated into the cell and degraded in amino acids. Cell factors involved in this regulation were identified in derepressed mutants obtained by random mutagenesis by transposition. DtpT, a di-tripeptides transporter and CodY, homologous of the *Bacillus subtilis* pleiotropic regulator of transcription were the most frequently inactivated proteins. pepC, pepN and opp-pepO1 transcription is not repressed in codY and dtpT mutant. These genes of the proteolytic system belong to a same regulon since their expression is repressed by CodY regulator depending on intracellular concentration of branched amino acids or derivative products of them.

6/3,AB/3 (Item 3 from file: 440)

DIALOG(R)File 440:Current Contents Search(R)

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12484820 References: 31

TITLE: Expression of cbsA encoding the collagen-binding S-protein of *Lactobacillus crispatus* JCM5810 in *Lactobacillus casei* ATCC 393(T)

AUTHOR(S): Martinez B; Sillanpaa J; Smit E; Korhonen TK; Pouwels PH (REPRINT)

AUTHOR(S) E-MAIL: Pouwels@voeding.tno.nl

CORPORATE SOURCE: TNO Voeding, Dept Appl Microbiol & Gene Technol, POB 360/NL-3700 AJ Zeist//Netherlands/ (REPRINT); TNO Voeding, Dept Appl Microbiol & Gene Technol, /NL-3700 AJ Zeist//Netherlands/; Wageningen Ctr Food Sci, /NL-6700 AN Wageningen//Netherlands/; Univ Helsinki, Div Gen Microbiol, /FIN-00014 Helsinki//Finland/

PUBLICATION TYPE: JOURNAL

PUBLICATION: JOURNAL OF BACTERIOLOGY, 2000, V182, N23 (DEC), P6857-6861

GENUINE ARTICLE#: 407WK

PUBLISHER: AMER SOC MICROBIOLOGY, 1752 N ST NW, WASHINGTON, DC 20036-2904 USA

ISSN: 0021-9193

LANGUAGE: English DOCUMENT TYPE: ARTICLE

ABSTRACT: The cbsA gene encoding the collagen-binding S-layer protein of *Lactobacillus crispatus* JCM5810 was expressed in *L. casei* ATCC 393(T). The S-protein was not retained on the surface of the recombinant bacteria but was secreted into the medium. By translational fusion of CbsA to the cell wall sorting signal of the proteinase, PrtP, of *L. casei*, CbsA was presented at the surface, rendering the transformants able to bind to

immobilized collagens.

6/3,AB/4 (Item 4 from file: 440)  
DIALOG(R)File 440:Current Contents Search(R)  
(c) 2003 Inst for Sci Info. All rts. reserv.

12122535 References: 70

TITLE: Streptococcus thermophilus cell wall-anchored proteinase: Release, purification, and biochemical and genetic characterization  
AUTHOR(S): Fernandez-Espla MD; Garault P; Monnet V; Rul F (REPRINT)  
AUTHOR(S) E-MAIL: rul@jouy.inra.fr  
CORPORATE SOURCE: INRA, Unite Rech Biochim & Struct Prot, /F-78352 Jouy En Josas//France/ (REPRINT); INRA, Unite Rech Biochim & Struct Prot, /F-78352 Jouy En Josas//France/  
PUBLICATION TYPE: JOURNAL  
PUBLICATION: APPLIED AND ENVIRONMENTAL MICROBIOLOGY, 2000, V66, N11 (NOV), P4772-+  
GENUINE ARTICLE#: 369FM  
PUBLISHER: AMER SOC MICROBIOLOGY, 1752 N ST NW, WASHINGTON, DC 20036-2904 USA  
ISSN: 0099-2240  
LANGUAGE: English DOCUMENT TYPE: ARTICLE

ABSTRACT: Streptococcus thermophilus CNRZ 385 expresses a cell envelope proteinase (PrtS), which is characterized in the present work, both at the biochemical and genetic levels. Since PrtS is resistant to most classical methods of extraction from the cell envelopes, we developed a three-step process based on loosening of the cell wall by cultivation of the cells in the presence of glycine (20 mM), mechanical disruption (with alumina powder), and enzymatic treatment (lysozyme). The pure enzyme is a serine proteinase highly activated by Ca<sup>2+</sup> ions. Its activity was optimal at 37 degreesC and pH 7.5 with acetyl-Ala-Ala-Pro-Phe-paranitroanilide as substrate. The study of the hydrolysis of the chromogenic and casein substrates indicated that PrtS presented an intermediate specificity between the most divergent types of cell envelope proteinases from lactococci, known as the PI and PIII types. This result was confirmed by the sequence determination of the regions involved in substrate specificity, which were a mix between those of PI and PIII types, and also had unique residues. Sequence analysis of the PrtS encoding gene revealed that PrtS is a member of the subtilase family. It is a multidomain protein which is matured and tightly anchored to the cell wall via a mechanism involving an LPXTG motif, PrtS bears similarities to cell envelope proteinases from pyogenic streptococci (C5a peptidase and cell surface proteinase) and lactic acid bacteria (PrtP, PrtH, and PrtB). The highest homologies were found with streptococcal proteinases which lack, as PrtS, one domain (the B domain) present in cell envelope proteinases from all other lactic acid bacteria.

6/3,AB/5 (Item 5 from file: 440)  
DIALOG(R)File 440:Current Contents Search(R)  
(c) 2003 Inst for Sci Info. All rts. reserv.

10898968 References: 91

TITLE: Multi-domain, cell-envelope proteinases of lactic acid bacteria  
AUTHOR(S): Siezen RJ (REPRINT)  
AUTHOR(S) E-MAIL: siezen@nizo.nl  
CORPORATE SOURCE: NIZO Food Res, POB 20/NL-6710 BA Ede//Netherlands/ (REPRINT); NIZO Food Res, /NL-6710 BA Ede//Netherlands/; Wageningen Ctr Food Sci, /NL-6700 AN Wageningen//Netherlands/  
PUBLICATION TYPE: JOURNAL  
PUBLICATION: ANTONIE VAN LEEUWENHOEK INTERNATIONAL JOURNAL OF GENERAL AND MOLECULAR MICROBIOLOGY, 1999, V76, N1 (NOV), P139-155  
GENUINE ARTICLE#: 233RK  
PUBLISHER: KLUWER ACADEMIC PUBL, SPUIBOULEVARD 50, PO BOX 17, 3300 AA DORDRECHT, NETHERLANDS  
ISSN: 0003-6072  
LANGUAGE: English DOCUMENT TYPE: ARTICLE

ABSTRACT: The multi-domain, cell-envelope proteinases encoded by the genes prtB of Lactobacillus delbrueckii subsp. bulgaricus, prtH of Lactobacillus helveticus, %prtP% of Lactococcus lactis, scpA of Streptococcus pyogenes and csp of Streptococcus agalactiae have been compared using multiple sequence alignment, secondary structure prediction and database homology searching methods. This comparative analysis has led to the prediction of a number of different domains in these cell-envelope proteinases, and their homology, characteristics and putative function are described. These domains include, starting from the N-terminus, a pre-pro-domain for secretion and activation, a serine protease domain (with a smaller inserted domain), two large middle domains A and B of unknown but possibly regulatory function, a helical spacer domain, a hydrophilic cell-wall spacer or attachment domain, and a cell-wall anchor domain. Not all domains are present in each cell-envelope proteinase, suggesting that these multi-domain proteins are the result of gene shuffling and domain swapping during evolution.

6/3,AB/6 (Item 6 from file: 440)  
DIALOG(R)File 440:Current Contents Search(R)  
(c) 2003 Inst for Sci Info. All rts. reserv.

10048063 References: 19

TITLE: Production of cholera toxin B subunit in Lactobacillus  
AUTHOR(S): Slos P; Dutot P; Reymund J; Kleinpeter P; Prozzi D; Kieny MP;  
Delsour J; Mercenier A (REPRINT); Hols P  
CORPORATE SOURCE: TRANSGENE SA,11 RUE MOLSHEIM/F-67082 STRASBOURG//FRANCE/  
(REPRINT); TRANSGENE SA,/F-67082 STRASBOURG//FRANCE/; UNIV CATHOLIQUE  
LOUVAIN,UNITE GENET/B-1348 LOUVAIN//BELGIUM/; INST PASTEUR,DEPT MICROBIOL  
ECOSYST/F-59019 LILLE//FRANCE/  
PUBLICATION TYPE: JOURNAL  
PUBLICATION: FEMS MICROBIOLOGY LETTERS, 1998, V169, N1 (DEC 1), P29-36  
GENUINE ARTICLE#: 142VJ  
PUBLISHER: ELSEVIER SCIENCE BV, PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS  
ISSN: 0378-1097  
LANGUAGE: English DOCUMENT TYPE: ARTICLE

ABSTRACT: The intracellular expression of the B subunit of cholera toxin (CTB) was first achieved in Lactobacillus paracasei LbTGS1.4 with an expression cassette including the P25 promoter of Streptococcus thermophilus combined with the translation initiation region from the strongly expressed L. pentosus D-lactate dehydrogenase gene (ldhD). Secretion of CTB was next attempted in L. paracasei LbTGS1.4 and L. plantarum NCIMB8826 with four different signal sequences from exported proteins of %lactic% acid bacteria (Lactococcus lactis Usp45 and %PrtP%, Enterococcus faecalis unknown protein and S. pyogenes M6 protein). Host-dependent secretion of CTB was clearly observed: whereas none of the secretion cassettes led to detectable CTB in the extracellular fraction of L. paracasei LbTGS1.4, secretion of CTB molecules was clearly achieved with three of the selected signal sequences in L. plantarum NCIMB8826. (C) 1998 Federation of European Microbiological Societies. Published by Elsevier Science B.V. All rights reserved.

6/3,AB/7 (Item 7 from file: 440)  
DIALOG(R)File 440:Current Contents Search(R)  
(c) 2003 Inst for Sci Info. All rts. reserv.

09861254 References: 17

TITLE: Molecular characterization of the Lactobacillus community in traditional processing of Mozzarella cheese  
AUTHOR(S): Morea M; Baruzzi F; Cappa F; Cocconcelli PS (REPRINT)  
CORPORATE SOURCE: UNIV CATTOLICA SACRO CUORE,IST MICROBIOL, VIA EMILIA  
PARMENSE 84/I-29100 PIACENZO//ITALY/ (REPRINT); UNIV CATTOLICA SACRO  
CUORE,IST MICROBIOL/I-29100 PIACENZO//ITALY/; CNR,IST TOSSINE &  
MICOTOSSINE PARASSITI VEGETALI/I-70125 BARI//ITALY/  
PUBLICATION TYPE: JOURNAL  
PUBLICATION: INTERNATIONAL JOURNAL OF FOOD MICROBIOLOGY, 1998, V43, N1-2 (

AUG 18), P53-60  
GENUINE ARTICLE#: 121UQ  
PUBLISHER: ELSEVIER SCIENCE BV, PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS  
ISSN: 0168-1605  
LANGUAGE: English DOCUMENT TYPE: ARTICLE

ABSTRACT: The natural *Lactobacillus* community involved in traditional Mozzarella cheese production has been investigated. The bacterial associations of whey, curd before stretching and Mozzarella were analyzed using randomly amplified polymorphic DNA (RAPD) to follow growth kinetics, and 16S rDNA sequencing to identify the taxonomical position of isolated strains. Analysis of RAPD fingerprints revealed that the *Lactobacillus* community was composed of 13 different biotypes and the sequence analysis of 16S rDNA demonstrated that the isolated strains belong to *L. plantarum*, *L. fermentum*, *L. helveticus* and *L. casei* subsp. *casei*. In addition, two strains of *Weissella hellenica* were isolated on selective media for lactobacilli. The four *L. casei* subsp. *casei* strains and *W. hellenica* contained sequences related to the *prtP* gene coding for proteinase, and the highest proteolytic activity in milk was found in one strain of *L. casei* subsp. *casei*. (C) 1998 Elsevier Science B.V. All rights reserved.

6/3,AB/8 (Item 8 from file: 440)  
DIALOG(R)File 440:Current Contents Search(R)  
(c) 2003 Inst for Sci Info. All rts. reserv.

07429879 References: 52  
TITLE: A NEW CELL SURFACE PROTEINASE - SEQUENCING AND ANALYSIS OF THE *prtB* GENE FROM *LACTOBACILLUS DELBRUECKII* SUBSP *BULGARICUS*  
AUTHOR(S): GILBERT C; ATLAN D (Reprint); BLANC B; PORTALIER R; GERMOND JE; LAPIERRE L; MOLLET B  
CORPORATE SOURCE: UNIV LYON 1,LAB MICROBIOL & GENET MOL,UMR CNRS 106/F-69622 VILLEURBANNE//FRANCE/ (Reprint); UNIV LYON 1,LAB MICROBIOL & GENET MOL,UMR CNRS 106/F-69622 VILLEURBANNE//FRANCE/; NESTEC LTD,NESTLE RES CTR/CH-1000 LAUSANNE 26//SWITZERLAND/  
PUBLICATION: JOURNAL OF BACTERIOLOGY, 1996, V178, N11 (JUN), P3059-3065  
GENUINE ARTICLE#: UN518  
ISSN: 0021-9193  
LANGUAGE: ENGLISH DOCUMENT TYPE: ARTICLE

ABSTRACT: Investigation of the chromosomal region downstream of the *lacZ* gene from *Lactobacillus delbrueckii* subsp. *bulgaricus* revealed the presence of a gene (*prtB*) encoding a proteinase of 1,946 residues with a predicted molecular mass of 212 kDa. The deduced amino acid sequence showed that *PrtB* proteinase displays significant homology with the N termini and catalytic domains of lactococcal *prtP* cell surface proteinases and is probably synthesized as a preproprotein. However, the presence of a cysteine near the histidine of the *PrtB* active site suggests that *PrtB* belongs to the subfamily of cysteine subtilisins. The C-terminal region strongly differs from those of *prtP* proteinases by having a high lysine content, an imperfect duplication of 41 residues, and a degenerated sequence compared with the consensus sequence for proteins anchoring in the cell walls of gram-positive bacteria. Finally, the product of the truncated *prtM*-like gene located immediately upstream of the *prtB* gene seems too short to be involved in the maturation of *PrtB*.

6/3,AB/9 (Item 9 from file: 440)  
DIALOG(R)File 440:Current Contents Search(R)  
(c) 2003 Inst for Sci Info. All rts. reserv.

06723525 References: 39  
TITLE: A NEW MOBILE GENETIC ELEMENT IN *LACTOBACILLUS DELBRUECKII* SUBSP *BULGARICUS*  
AUTHOR(S): GERMOND JE; LAPIERRE L; DELLEY M; MOLLET B (Reprint)  
CORPORATE SOURCE: NESTEC LTD,NESTLE RES CTR,VERS CHEZ LES BLANC,POB 44/CH-1000 LAUSANNE 26//SWITZERLAND/ (Reprint); NESTEC LTD,NESTLE RES CTR/CH-1000 LAUSANNE 26//SWITZERLAND/  
PUBLICATION: MOLECULAR & GENERAL GENETICS, 1995, V248, N4 (AUG 30), P



407-416  
GENUINE ARTICLE#: RU234  
ISSN: 0026-8925  
LANGUAGE: ENGLISH DOCUMENT TYPE: ARTICLE

ABSTRACT: A new IS element (ISL3) was discovered in *Lactobacillus delbrueckii* subsp. *bulgaricus* during the characterization of the linkage relationships between the two genes important for milk fermentation, beta-galactosidase (lacZ) and the cell-wall associated protease (%prtP%). ISL3 is a 1494 bp element, flanked by 38 bp imperfect inverted repeats, and generates an 8 bp target duplication upon insertion. It contains one open reading frame, encoding a potential polypeptide of 434 amino acids, which shows significant homology (34% identity) to the transposase of the *Leuconostoc mesenteroides* element IS1165. Molecular analysis of spontaneous lacZ mutants revealed some strains that had sustained deletions of 7 to 30 kb in size, centered on and eliminating the copy of ISL3 next to lacZ. Other deletion endpoints were identified as located immediately adjacent to ISL3. Furthermore, genetic translocations that had occurred via transposition of ISL3 were observed fortuitously in cultures screened for deletion mutants. ISL3 can be found in one to several copies in various strains of *L. delbrueckii*. However, it was not present in other dairy %lactic% acid bacteria tested.

6/3,AB/10 (Item 10 from file: 440)  
DIALOG(R)File 440:Current Contents Search(R)  
(c) 2003 Inst for Sci Info. All rts. reserv.

02975722 References: 38  
TITLE: LACTOCOCCAL PROTEINASE MATURATION PROTEIN PRtM IS A LIPOPROTEIN  
AUTHOR(S): HAANDRIKMAN AJ; KOK J; VENEMA G  
CORPORATE SOURCE: STATE UNIV GRONINGEN, DEPT GENET, KERKLAAN 30/9751 NN  
HAREN//NETHERLANDS/ (Reprint)  
PUBLICATION: JOURNAL OF BACTERIOLOGY, 1991, V173, N14 (JUL), P4517-4525  
GENUINE ARTICLE#: FX327  
LANGUAGE: ENGLISH DOCUMENT TYPE: ARTICLE

ABSTRACT: The production of enzymatically active proteinase by lactococci requires the joint presence of a proteinase gene, %prtP%, and a gene encoding a maturation protein, prtM. A 32-kDa protein produced by *Escherichia coli* upon expression of the prtM gene under the direction of the T7 RNA polymerase promoter was purified and used to obtain PrtM-specific antibodies. With these antibodies, immunogold labeling of lactococcal cells revealed that PrtM was associated with the lactococcal cell envelope. Western blot (immunoblot) analysis of whole lactococcal cells and isolated membrane vesicles indicated that PrtM was a membrane-associated protein. Radiolabeling of *Lactococcus lactis* with [H-3]palmitic acid showed that PrtM was a lipoprotein. Partial secretion of PrtM into the culture medium was observed after Cys-24, the target residue for lipid modification, was replaced by an Ala residue by means of site-directed mutagenesis. This mutation did not affect proteinase activity.

6/3,AB/11 (Item 11 from file: 440)  
DIALOG(R)File 440:Current Contents Search(R)  
(c) 2003 Inst for Sci Info. All rts. reserv.

02861810 References: 25  
TITLE: CHARACTERIZATION OF THE CELL WALL-BOUND PROTEINASE OF  
LACTOBACILLUS-CASEI HN14  
AUTHOR(S): KOJIC M; FIRA D; BANINA A; TOPISIROVIC L (Reprint)  
CORPORATE SOURCE: INST MOLEC GENET & GENET ENGN, VOJVODE STEPE 283, POB  
794/YU-11001 BELGRADE//YUGOSLAVIA/ (Reprint); INST MOLEC GENET & GENET  
ENGN, VOJVODE STEPE 283, POB 794/YU-11001 BELGRADE//YUGOSLAVIA/  
PUBLICATION: APPLIED AND ENVIRONMENTAL MICROBIOLOGY, 1991, V57, N6 (JUN), P  
1753-1757  
GENUINE ARTICLE#: FP564  
LANGUAGE: ENGLISH DOCUMENT TYPE: ARTICLE

ABSTRACT: *Lactobacillus casei* HN14, which was isolated from homemade cheese, produces an extracellular, cell wall-bound proteinase. The HN14 proteinase can be removed from the cell envelope by washing the cells in a Ca<sup>2+</sup>-free buffer. The activity of the crude proteinase extract is inhibited by phenylmethylsulfonyl fluoride, showing that the enzyme is a serine-type proteinase. Considering the substrate specificity, the HN14 proteinase is similar to the lactococcal PI-type enzyme, since it hydrolyzes beta-casein only. *Lactobacillus casei* HN14 appeared to be plasmid free, which suggests that the proteinase gene is chromosomally located. Chromosomal DNA of this strain hybridizes with DNA probes Q1 (which contains a fragment of the prtM gene) and Q6 and Q92 (which contain fragments of the %prtP% gene); all three probes originated from the proteinase gene region of *Lactococcus lactis* subsp. *cremoris* Wg2. A restriction enzyme map of the proteinase region of *Lactobacillus casei* HN14 was constructed on the basis of hybridization experiments. Comparison of the restriction enzyme maps of the *Lactobacillus casei* HN14 proteinase gene region and those of lactococcal proteinase gene regions studied so far indicates that they are highly similar.

6/3,AB/12 (Item 1 from file: 399)  
 DIALOG(R)File 399:CA SEARCH(R)  
 (c) 2003 American Chemical Society. All rts. reserv.

137274991 CA: 137(19)274991e JOURNAL  
 Identification of the cell-envelope proteinase of lactic acid bacteria isolated from Kimchi  
 AUTHOR(S): Yujin, Lee; Choi, Jae Yeon; Lee, Hyong Joo; Chang, Hae Choon; Kim, Jeong Hwan; Chung, Dae Kyun; Kim, Young-Suk; Cho, Somi Kim; Lee, Jong-Hoon  
 LOCATION: Department of Food Science and Biotechnology, Kyonggi University, Suwon, 442-760, S. Korea  
 JOURNAL: Han'guk Misaengmul-Saengmyongkong Hakhoechi (Han'guk Misaengmul-Saengmyongkong Hakhoechi) DATE: 2002 VOLUME: 30 NUMBER: 2  
 PAGES: 116-122 CODEN: HMHAAS LANGUAGE: Korean PUBLISHER: Korean Society for Microbiology and Biotechnology

6/3,AB/13 (Item 1 from file: 50)  
 DIALOG(R)File 50:CAB Abstracts  
 (c) 2003 CAB International. All rts. reserv.

04415507 CAB Accession Number: 20033043820  
 Effect of proteinases of starter bacteria on the growth and proteolytic activity of *Lactobacillus plantarum* DPC2741.  
 Cagno, R. di; Angelis, M. de; Upadhyay, V. K.; McSweeney, P. L. H.; Minervini, F.; Gallo, G.; Gobetti, M.  
 Dipartimento di Protezione delle Piante e Microbiologia Applicata, Facolta di Agraria, Universita degli Studi di Bari, Via Amendola 165/A, Bari 70126, Italy.  
 International Dairy Journal vol. 13 (2/3): p.145-157  
 Publication Year: 2003  
 ISSN: 0958-6946 --  
 Language: English  
 Document Type: Journal article  
 The effects of partially purified proteinases (%PrtP%) of *Streptococcus thermophilus* ST8, *Lactobacillus helveticus* PR4, *Lb. delbrueckii* subsp. *bulgaricus* B397, *Lactococcus lactis* subsp. *cremoris* ST2 or *Brevibacterium linens* 9 on the growth and proteolytic activity of *Lb. plantarum* DPC2741 were studied. In sterile reconstituted skim milk (RSM), almost all the %PrtP% promoted higher cell numbers compared with the pure bacterial culture. The enzymes of *Lb. helveticus* PR4 and *Lc. lactis* subsp. *cremoris* ST2 were the most effective in increasing the maximum growth rate (micro max), the time in which micro max was held constant and in decreasing the lag phase of growth. Compared with the pure bacterial culture, higher concentrations of free amino acids were found when *Lb. plantarum* DPC2741 was cultivated in RSM with the %PrtP% of starter bacteria; the profiles of free amino acids and peptides depended on the type of %PrtP%. *Lb.*

plantarum DPC2741 did not grow when alpha s1-, beta -, or kappa -casein (CN) fractions were substituted for amino acids in the chemically defined medium (CDM). When %Prtp% were added to CDM, bacterial growth was restored to an extent that depended on the substrate specificity of the enzyme and CN fraction used. Experiments in which combinations of the three essential amino acids (Glu, Val and Ile) were added to CDM containing CN fractions made it possible to identify some amino acid deficiency which was responsible for the limited growth of Lb. plantarum DPC2741 in combination with %Prtp% of starter bacteria. To simulate cheese ripening conditions, Lb. plantarum DPC2741 alone and in combinations with %Prtp% of Str. thermophilus ST8, Lb. delbrueckii subsp. bulgaricus B397 or Lb. helveticus PR4 was grown into a model cows' milk curd system for 10 days at 12 deg C. All the %Prtp% enhanced the bacterial growth, increased the concentration of free amino acids and promoted profiles of amino acids and peptides qualitatively different. 37 ref.

6/3,AB/14 (Item 2 from file: 50)  
DIALOG(R)File 50:CAB Abstracts  
(c) 2003 CAB International. All rts. reserv.

03411797 CAB Accession Number: 970403304  
Controlled overproduction of proteins by %lactic% acid bacteria.  
Kuipers, O. P.; Ruyter, P. G. G. A. de; Kleerebezem, M.; Vos, W. M. de  
Department of Biophysical Chemistry, NIZO, P.O. Box 20, 6710 BA Ede,  
Netherlands.  
Trends in Biotechnology vol. 15 (4): p.135-140  
Publication Year: 1997  
ISSN: 0167-7799 --  
Language: English  
Document Type: Journal article  
Recent advances in the development of controlled gene expression systems, which allow the regulated over-production of desirable proteins by %lactic% acid bacteria (LAB), are reviewed under the following headings: regulated gene expression systems for LAB (lacA-promoter, dnaJ-promoter, sodA-promoter, %prtp%-promoter, the repressor/operator of the phi rlt-based system, the xylA-promoter, the tryptophan-controlled system, the PA170-promoter, the phi 31-middle-promoter and ori-based system, and the nisA/nisF-promoter); and examples and prospects of application of controlled expression systems. Some systems benefit from the fact that the expression vectors, marker genes and inducing factors can be used directly in food applications because they are all derived from food-grade LAB. These systems have also been employed for the development of autolytic bacteria, suitable for various industrial applications. 33 ref.

6/3,AB/15 (Item 3 from file: 50)  
DIALOG(R)File 50:CAB Abstracts  
(c) 2003 CAB International. All rts. reserv.

02629574 CAB Accession Number: 920455911  
Study of the proteolytic activity of %lactic% acid bacteria. The contribution of bacterial genetics.  
Original Title: Etude de l'activite proteolytique des bacteries lactiques. L'apport de la genetique bacterienne.  
Chopin, A.; Chopin, M. C.; Gripon, J. C.  
INRA-CRJ, Station de Recherches Laitieres, Domaine de Vilbert, 78352 Jouy en Josas Cedex, France.  
Conference Title: Les bacteries lactiques: Actes du colloque LACTIC 91 (Caen 12-13 septembre 1991)  
p.163-173  
Publication Year: 1992  
Editors: Novel, G.; Querler, J. F. le  
Publisher: Centre de Publications de l'Universite de Caen -- Caen, France  
ISBN: 2-905461-74-8  
Language: French Summary Language: english  
Document Type: Conference paper

The best characterized proteinase of %lactic% acid bacteria is the lactococcal cell wall proteinase, encoded by %prtP% and activated by prtM. The sequences of these genes are available. The %prtP% genes in different lactococci are related and proteinases belong to the subtilisin family. The 2 genes are linked and flanked by insertion sequences. Peptidases involved in nitrogen metabolism are less well characterized. It has been shown that the active site of the aminopeptidase I of Lactococcus lactis var. lactis is homologous to that of papain. The cloned genes and characterization of the enzymes will allow the rational construction of strains with particular, desired, proteolytic properties. 24 ref.

6/3,AB/16 (Item 4 from file: 50)  
DIALOG(R)File 50:CAB Abstracts  
(c) 2003 CAB International. All rts. reserv.

02453208 CAB Accession Number: 910448530  
Improvement of the proteolytic capacity of %lactic% acid bacteria.  
Vos, P.; Bruinenberg, P.; Sakellaris, G.; Vos, W. M. de  
Department of Biophysical Chemistry, NIZO, P.O. Box 20, 6710 BA Ede,  
Netherlands.  
Conference Title: Brief Communications of the XXIII International Dairy  
Congress, Montreal, October 8-12, 1990, Vol. II.  
p.381  
Publication Year: 1990  
Publisher: International Dairy Federation -- Brussels, Belgium  
ISBN: 0-9694713-4-3  
Language: English  
Document Type: Abstract only

A DNA fragment containing prtM and %prtP% genes (essential for production of active proteinase) derived from Lactococcus lactis var. cremoris SK11 was cloned into vectors pNZ122 and pIL253, and recombinant prt-plasmids were introduced into Prt-negative derivatives of model and industrially used Lactococcus lactis and Lactococcus cremoris strains. The resulting lactococcal cells produced a proteinase with characteristics the same as but in significantly higher amounts than that produced by the wild-type strain SK11; they also showed a higher specific growth rate accompanied by faster acidification than did the wild-type strain, but final cell numbers were not affected.

6/3,AB/17 (Item 1 from file: 51)  
DIALOG(R)File 51:Food Sci.&Tech.Abs  
(c) 2003 FSTA IFIS Publishing. All rts. reserv.

00627086 91-08-b0081 SUBFILE: FSTA  
Protein secretion by %lactic% acid bacteria.)  
Simons, G.  
Werkgroep Moleculaire Genetica, Afdeling Biofysische Chem., NIZO, Ede,  
Netherlands  
Voedingsmiddelentechnologie 1991 , 24 (3) 11-14  
LANGUAGE: Dutch SUMMARY LANGUAGE: English  
Possible use of %lactic% acid bacteria for production of foreign proteins is discussed, with reference to: general characteristics of %lactic% acid bacteria; sequencing of genes for 4 extracellular proteins of Lactococcus lactis; signal peptides of these genes; construction of secretion vectors based on regulatory sequences of the L. lactis %prtP% and usp45 genes; and application of these secretion vectors for secretion of bovine prochymosin and Bacillus stearothermophilus ALPHA-amylase by L. lactis. (AJDW)

6/3,AB/18 (Item 1 from file: 144)  
DIALOG(R)File 144:Pascal  
(c) 2003 INIST/CNRS. All rts. reserv.

14739721 PASCAL No.: 00-0416413  
LES PROTEASES DE PAROI DES LACTOCOQUES  
(CELL-WALL LOCATED PROTEINASE OF LACTOCOCCI)  
FLAMBARD Benedicte; JUILLARD Vincent, dir

Universite de Lyon 1, Villeurbanne, France  
Univ.: Universite de Lyon 1. Villeurbanne. FRA Degree: Th. doct.  
1999-11; 1999 193 p.

Language: French Summary Language: French; English

Les lactocoques, pour se developper dans le lait, requierent l'action d'une protease degradant les caseines du lait. Cette enzyme est ancree a la paroi de la bacterie. Les souches presentent une protease de type P SUB I ou de type P SUB I SUB I SUB I. L'objectif initial de ce travail etait d'evaluer l'impact du type de protease porte par la souche sur sa croissance. L'etude de la croissance de deux souches genetiquement modifiees, ne differant que par le type de protease qu'elles synthetisent, a montre que (i) la vitesse de croissance de la souche %Prtp% SUB I etait ralentie par la souche %Prtp% SUB I SUB I SUB I. Les peptides accumules dans le lait par la souche %Prtp% SUB I SUB I SUB I ont un effet sur le taux de synthese de la protease de la souche %Prtp% SUB I, (ii) les apports en acides amines dependent du type de protease. Ces resultats permettent donc de supposer que les produits de degradation issus des caseines different avec le type d'enzyme. Ceci a ete verifie avec un substrat modele, la caseine beta. Cette demarche a permis de plus de montrer que la specificite de la protease de type P SUB I SUB I SUB I varie selon que l'enzyme est native (ancree aux cellules) ou purifiee (liberee dans le milieu en absence de Ca SUP 2 SUP +). Cette liberation est la consequence d'un changement de conformation de l'enzyme qui conduit a une autoproteolyse. Pour determiner quelle etape etait responsable du changement de specificite, il convenait de decoupler le changement de conformation de l'autoproteolyse. Cela necessite l'identification, puis la mutation du site d'autodigestion de l'enzyme, jusqu'alors inconnu. Pour atteindre le premier objectif, on a developpe une demarche complexe (insertion, dans la protease, d'une proteine rapporteur et d'un site de clivage chimique), le sequencage de la proteine liberee dans le milieu s'etant heurte a des difficultes d'ordre technique.

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6/3,AB/19 (Item 2 from file: 144)  
DIALOG(R)File 144:Pascal  
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14690668 PASCAL No.: 00-0365811  
REGULATION DE L'EXPRESSION DES GENES CODANT POUR LES COMPOSANTS DU  
SYSTEME PROTEOLYTIQUE CHEZ LACTOCOCCUS LACTIS  
(TRANSCRIPTIONAL REGULATION OF LACTOCOCCUS LACTIS PROTEOLYTIC SYSTEM)  
GUEDON Eric; RENAULT Pierre, dir  
Universite de Paris 11, Orsay, France  
Univ.: Universite de Paris 11. Orsay. FRA Degree: Th. doct.  
2000-03; 2000 202 p.

Language: French Summary Language: French; English

Lactococcus lactis possede un systeme proteolytique complexe pour degrader les caseines en acides amines essentiels a sa croissance. Une protease de paroi degrade les caseines en peptides. Ces peptides entrent dans la cellule grace a trois systemes de transport puis sont degrades par des peptidases cytoplasmiques. Chez L. lactis, les etudes du systeme proteolytique ont porte essentiellement sur une caracterisation biochimique de ces composants. Peu d'etudes ont concerne la regulation et l'expression des genes qui le constituent. Cette etude porte sur la regulation de la transcription de 17 genes codant pour les composants du systeme proteolytique chez L. lactis subsp. cremoris MG1363. Une source riche en peptide reprime l'expression de 8 de ces genes. Ils codent pour deux aminopeptidases (PepC, PepN), une endopeptidase (PepO1), une dipeptidase (PepDA2), deux systemes de transport a peptides (DtpT, Opp) et pour la protease de paroi %Prtp%. Cette repression coordonnee permet de definir un nouveau regulon chez L. lactis, le regulon cps (control of the proteolytic system). Le signal regulateur et les proteines cytoplasmiques impliquees dans cette repression ont ete caracterises. Les dipeptides contenant un acide amine branche (ILV) repriment la transcription des genes du regulon cps. Cette repression n'est pas sous le controle direct de ces dipeptides mais de la concentration cytoplasmique en ILV. Les proteines, CodY, DtpT et le PTS SUP m SUP a SUP n, repriment la transcription des genes du regulon

cps. Un modele de regulation des genes du regulon cps, impliquant les ILV et les proteines CodY, DtpT et le PTS SUP m SUP a SUP n , a ete propose. CodY serait la proteine qui reprimerait la transcription des genes du regulon. Les acides amines branches moduleraient l'activite de CodY. Le systeme DtpT interviendrait indirectement en modulant la concentration cytoplasmique en ILV. De meme, le PTS SUP m SUP a SUP n , le systeme PTS vraisemblablement responsable du transport du glucose, aurait un role regulateur indirect.

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6/3,AB/20 (Item 1 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00957711

METHODS AND COMPOSITIONS FOR PREVENTION OF ANGIOPROLIFERATION  
PROCEDES ET COMPOSITIONS DESTINES A PREVENIR L'ANGIOGENESE

Patent Applicant/Assignee:

UNIVERSITY OF FLORIDA, 223 Grinter Hall, P.O. Box 115500, US, US  
(Residence), US (Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

KOZAROV Emil V, 3rd Floor, Walker Hall, Office of Technology Licensing,  
Gainesville, FL 32611, US, US (Residence), US (Nationality),  
(Designated only for: US)

PROGULSKE-FOX Ann, 3rd Floor, Walker Hall, Office of Technology  
Licensing, Gainesville, FL 32611, US, US (Residence), US (Nationality),  
(Designated only for: US)

Legal Representative:

HILLMAN Lisa M W (agent), McDhonnell Boehnen Hulbert & Berghoff, 300  
South Wacker Drive, Suite 3200, Chicago, IL 60606, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200289833 A2 20021114 (WO 0289833)

Application: WO 2002US13590 20020502 (PCT/WO US0213590)

Priority Application: US 2001849115 20010505

Parent Application/Grant:

Related by Continuation to: US 2001849115 20010505 (CIP)

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU

CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP

KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO

RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 12207

English Abstract

The invention provides pharmaceutical compositions  
comprising *Porphyromonas gingivalis* protease and hemagglutinin  
polypeptides that have anti-angiogenic activity and methods for their  
use.

French Abstract

L'invention concerne des compositions pharmaceutiques contenant une  
protease *Porphyromonas gingivalis* et des polypeptides  
hemagglutinines qui possedent une activite anti-angiogenique ainsi que  
des procedes d'utilisation de ces compositions.

6/3,AB/21 (Item 2 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00876389

USE OF ECTOENZYMES AND SECRETED ENZYMES TO MONITOR CELLULAR PROLIFERATION

UTILISATION D'ECTOENZYMES ET D'ENZYMES SECRETEES POUR SUIVRE LA  
PROLIFERATION CELLULAIRE

Patent Applicant/Assignee:

ELITRA PHARMACEUTICALS INC, Suite A, 3510 Dunhill Street, San Diego, CA  
92121, US, US (Residence), US (Nationality), (For all designated states  
except: US)

Patent Applicant/Inventor:

ZYSKIND Judith, 8514 La Jolla Scenic Drive, La Jolla, CA 92047, US, US  
(Residence), US (Nationality), (Designated only for: US)

Legal Representative:

HUNT Dale C (agent), 16th floor, 620 Newport Center Drive, Newport Beach,  
CA 92660, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200210442 A1 20020207 (WO 0210442)

Application: WO 2000US21049 20000802 (PCT/WO US0021049)

Priority Application: WO 2000US21049 20000802

Designated States: AE AG AL AM AT AT (utility model) AU AZ BA BB BG BR BY  
BZ CA CH CN CR CU CZ CZ (utility model) DE DE (utility model) DK DK  
(utility model) DM DZ EE EE (utility model) ES FI FI (utility model) GB  
GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KR (utility model) KZ LC LK  
LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK  
SK (utility model) SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE  
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 31488

English Abstract

The present invention relates to methods of measuring cellular  
proliferation using ectoenzymes such as membrane-bound chitobiase  
(N,N'-diacetylchitobiase) and nucleic acids for use in such methods.

French Abstract

L'invention porte sur des procedes de mesure de la prolifération  
cellulaire a l'aide d'ectoenzymes telles que la chitobiase  
(N,N'-diacetylchitobiase) liee a la membrane, et d'acides nucleiques  
nécessaires auxdits procedes.

6/3,AB/22 (Item 3 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00836656

METHOD OF TREATING PHENYLKETONURIA AND MEANS THEREFOR

METHODE ET MOYENS DE TRAITEMENT DE LA PHENYLKETONURIE

Patent Applicant/Assignee:

NILAB APS, Toftegardsvej 16, DK-5500 Middelfart, DK, DK (Residence), DK  
(Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

JOHNSEN Mads, Sveasvej 5, 3. th, DK-1917 Frederiksberg C, DK, DK  
(Residence), DK (Nationality), (Designated only for: US)

RAVN Peter, Erikaparken 59, 1.th., DK-2820 Gentofte, DK, DK (Residence),  
DK (Nationality), (Designated only for: US)

MADSEN Soren Michael, Baldersgade 11, 1. th., DK-2200 Copenhagen N, DK,  
DK (Residence), DK (Nationality), (Designated only for: US)

VRANG Astrid, Langs Hegnet 76, DK-2800 Lyngby, DK, DK (Residence), DK  
(Nationality), (Designated only for: US)

ISRAELSEN Hans, Provstensvej 1A, DK-3450 Allerod, DK, DK (Residence), DK  
(Nationality), (Designated only for: US)

BREDMOSE Lars, Brynhildegade 9, 3. tv., DK-2200 Copenhagen N, DK, DK  
(Residence), DK (Nationality), (Designated only for: US)

ARNAU Jose, Melvillevej 9, DK-2900 Hellerup, DK, DK (Residence), ES  
(Nationality), (Designated only for: US)

JENSEN Stein Hojmark, Toftegardsvej 16, DK-5500 Middelfart, DK, DK  
(Residence), DK (Nationality), (Designated only for: US)

GJETTING Torben, Vibevej 7, DK-4040 Jyllinge, DK, DK (Residence), DK  
(Nationality), (Designated only for: US)  
NIELSEN Egon, Niels W. Gades Gade 33, DK-2100 Copenhagen O, DK, DK  
(Residence), DK (Nationality), (Designated only for: US)  
Legal Representative:  
PLOUGMANN & VINGTOFT A S (agent), Sankt Annae Plads 11, P.O. Box 3007,  
DK-1021 Copenhagen K, DK,  
Patent and Priority Information (Country, Number, Date):  
Patent: WO 200168822 A2-A3 20010920 (WO 0168822)  
Application: WO 2001DK172 20010314 (PCT/WO DK0100172)  
Priority Application: US 2000525116 20000314  
Designated States: AE AG AL AM AT AT (utility model) AU AZ BA BB BG BR BY  
BZ CA CH CN CR CU CZ CZ (utility model) DE DE (utility model) DK DK  
(utility model) DM DZ EE EE (utility model) ES FI FI (utility model) GB  
GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA  
MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SK (utility model)  
SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM  
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#### English Abstract

Novel cells expressing phenylalanine hydroxylase activity and novel fusion proteins comprising, in addition to the phenylalanine hydroxylase activity, a polypeptide enhancing and/or stabilising the phenylalanine hydroxylase activity are provided. The cells are useful for treatment of phenylketonuria (PKU) that is caused by genetically conditioned metabolic disorders in humans and animals resulting in an accumulation in the body of phenylalanine. The cells and/or proteins may be administered directly to the PKU patients to effect conversion of phenylalanine in the body, or added to proteinaceous food products in order to reduce the content of phenylalanine.

#### French Abstract

L'invention concerne des cellules exprimant une activite de la phenylalanine-hydroxylase et des proteines hybrides comprenant, en plus de l'activite de phenylalanine-hydroxylase, un polypeptide renforçant et/ou stabilisant cette derniere. Lesdites cellules s'avèrent utiles dans le traitement de la phenylcetonurie, causee par des troubles du metabolisme conditionnes genetiquement chez les humains et les animaux, et resultant d'une accumulation de phenylalanine dans le corps. Ces cellules et/ou proteines peuvent etre administrees directement aux patients atteints de phenylcetonurie pour provoquer la conversion de la phenylalanine dans le corps, ou elles peuvent etre additionnees a des produits alimentaires proteiniques pour reduire le taux de phenylalanine.

6/3,AB/23 (Item 4 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00796874  
MUTANT %LACTIC% BACTERIA WITH A CAPACITY FOR OVEREXPRESSION AT LEAST ONE  
PEPTIDASE  
BACTERIES LACTIQUES MUTANTES CAPABLES DE SUREXPRIMER AU MOINS UNE PEPTIDASE  
Patent Applicant/Assignee:  
INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE -INRA-, 147, rue de  
l'Universite, F-75338 Paris Cedex 07, FR, FR (Residence), FR  
(Nationality), (For all designated states except: US)  
Patent Applicant/Inventor:  
GUEDON Eric, 26, rue Jules Ferry, F-92100 Boulogne, FR, FR (Residence),  
FR (Nationality), (Designated only for: US)  
ANBA-MONDOLONI Jamila, 13, rue Charles Linne, F-78180  
Montigny-le-Bretonneux, FR, FR (Residence), FR (Nationality),  
(Designated only for: US)



DELORME Christine, 15, residence des Basses Garennes, F-91120 Palaiseau,  
FR, FR (Residence), FR (Nationality), (Designated only for: US)  
RENAULT Pierre, 9, rue Magellan, F-78180 Montigny-le-Bretonneux, FR, FR  
(Residence), FR (Nationality), (Designated only for: US)

Legal Representative:

BREESE-MAJEROWICZ (agent), 3, avenue de l'Opera, F-75001 Paris, FR,

Patent and Priority Information (Country, Number, Date):

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Priority Application: FR 9912924 19991015

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DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ

LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG

SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: French

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Fulltext Word Count: 7040

English Abstract

The invention relates to mutants of %lactic% bacteria such as L. lactis or S. thermophilus which can overexpress one or more peptidases, characterised in that at least one of the negative regulation factors of at least one of the peptidase genes of said bacteria is inactivated, said negative regulation factor being selected from a group comprising the gene codY, the genes of the operon lev, and a gene coding for a protein that is homologous with a beta-glucosidase.

French Abstract

La presente invention se rapporte a des mutants de bacteries lactiques, comme L. lactis ou S. thermophilus capables de surexprimer une ou plusieurs peptidases, caracterises en ce que l'un au moins des facteurs de regulation negative de l'un au moins des genes des peptidases desdites bacteries est inactive, ledit facteur de regulation negative etant choisi dans le groupe comprenant le gene codY, les genes de l'operon lev, un gene codant une proteine homologue a une beta-glucosidase.

6/3,AB/24 (Item 5 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00777600

METHOD OF ISOLATING SECRETION SIGNALS IN %LACTIC% ACID BACTERIA AND NOVEL  
SECRETION SIGNALS ISOLATED FROM LACTOCOCCUS LACTIS

PROCEDE D'ISOLEMENT DE SIGNAUX DE SECRETION DANS DES BACTERIES D'ACIDE  
LACTIQUE ET NOUVEAUX SIGNAUX DE SECRETION ISOLEES ISSUS DE LACTOCOCCUS  
LACTIS

Patent Applicant/Assignee:

BIOTEKNOLOGISK INSTITUT, Kogle Alle 2, DK-2970 Hoersholm, DK, DK

(Residence), DK (Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

RAVN Peter, Hegnsvej 123, DK-2850 Naerum, DK, DK (Residence), DK

(Nationality), (Designated only for: US)

MADSEN Soeren Michael, 1st floor, Baldersgade 11, DK-2200 Copenhagen N,

DK, DK (Residence), DK (Nationality), (Designated only for: US)

VRANG Astrid, Langs Hegnet 76, DK-2800 Lyngby, DK, DK (Residence), DK

(Nationality), (Designated only for: US)

ISRAELSEN Hans, Proevstensvej 1A, DK-3450 Allerod, DK, DK (Residence),

DK (Nationality), (Designated only for: US)

JOHNSEN Mads Groenvold, Sveasvej 5, 3rd floor, DK-1917 Frederiksberg C,

DK, DK (Residence), DK (Nationality), (Designated only for: US)

BREDMOSE Lars, Brynhildegade 9, 3rd floor, DK-2200 Copenhagen N, DK, DK

(Residence), DK (Nationality), (Designated only for: US)

ARNAU Jose, Melvillevej 9, DK-2900 Hellerup, DK, DK (Residence), ES

(Nationality), (Designated only for: US)

Legal Representative:

PLOUGMANN VINGTOFT & PARTNERS A S (agent), Sankt Annae Plads 11, P.O. Box 3007, DK-1021 Copenhagen K, DK,

Patent and Priority Information (Country, Number, Date):

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Application: WO 2000DK437 20000804 (PCT/WO DK0000437)

Priority Application: DK 991105 19990806

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Filing Language: English

Fulltext Word Count: 14970

English Abstract

A method of identifying nucleotide sequences coding for signal peptides in lactic acid bacteria, using a DNA molecule comprising a transposon including a promoterless reporter gene from which DNA molecule a region between the LR and the reporter gene is deleted and the DNA molecule comprises a DNA sequence coding for a secretion reporter molecule. By deleting the region between the LR and the reporter gene, stop codons in-frame with the secretion reporter molecule is removed which upon transposition permits translational fusions from upstream the LR.

French Abstract

L'invention concerne un procede d'identification de sequences nucleotidiques codant pour des peptides signaux dans des bacteries d'acide lactique, qui utilise une molecule d'ADN contenant un transposon qui inclut un gene rapporteur sans promoteur ; une region de cette molecule d'ADN, situee entre l'extremite terminale gauche et le gene rapporteur, est deletee et la molecule d'ADN comporte une sequence d'ADN codant pour une molecule rapporteur de secretion. La deletion de la region situee entre l'extremite terminale gauche et le gene rapporteur permet d'eliminer les codons de terminaison situes dans le meme cadre de lecture que la molecule rapporteur de secretion, ce qui, au cours d'une transposition, permet des fusions traductionnelles a partir d'une region situee en aval de l'extremite terminale gauche.

6/3,AB/25 (Item 6 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00520279

A PROTEIN REGION RESPONSIBLE OF BINDING TO EPITHELIAL CELL TYPES AND A DNA SEQUENCE ENCODING SAID REGION

UNE REGION PROTEIQUE RESPONSABLE DE LA LIAISON AVEC DES TYPES DE CELLULES EPITHELIALES ET UNE SEQUENCE D'ADN CODANT POUR CETTE REGION

Patent Applicant/Assignee:

KORHONEN Timo,  
PALVA Airi,  
PALVA Ilkka,  
HYNONEN Ulla,  
WESTERLUND-WIKSTROM Benita,

Inventor(s):

KORHONEN Timo,  
PALVA Airi,  
PALVA Ilkka,  
HYNONEN Ulla,  
WESTERLUND-WIKSTROM Benita,

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Priority Application: FI 98782 19980403  
Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE  
ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT  
LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT  
UA UG US UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ UG ZW AM AZ BY KG KZ MD  
RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF  
CG CI CM GA GN GW ML MR NE SN TD TG  
Publication Language: English  
Fulltext Word Count: 15509

#### English Abstract

This invention relates to a DNA molecule encoding a polypeptide responsible of binding to human and/or animal epithelial cell types. It has been found that various fragments of S-layer protein SlpA of *i*(*Lactobacillus brevis*) has adhesive properties to epithelial cells types. It is possible to modify or improve the binding capacity of various prokaryotic or eucaryotic cells to human and/or animal epithelial cell types, like intestinal, urogenital and/or endothelial cell types by using lactobacillar surface structures of this invention. In particular, it is possible with the nucleotide sequences of this invention to improve the binding properties of a host cell having probiotic effects to human and/or animal epithelial cell types.

#### French Abstract

L'invention concerne une molecule d'ADN codant pour un polypeptide se liant a des types de cellules epitheliales humaines et/ou animales. On a decouvert que differents fragments de proteine couche S SlpA de *i*(*Lactobacillus brevis*) presente des proprietes adhesives a l'egard des types de cellules epitheliales. Il est possible de modifier ou ameliorer la capacite de liaison de plusieurs cellules procaryotes ou eucaryotes aux types de cellules epitheliales humaines et/ou animales, comme les types de cellules endotheliales, intestinales et/ou uro-genitales au moyen de structures a surfaces lactobacillaires. Il est possible avec les sequences nucleotidiques d'ameliorer les proprietes de liaison d'une cellule hote presentant des effets probiotiques agissant sur les types de cellules epitheliales humaines et/ou animales.

6/3,AB/26 (Item 7 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT  
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00494484

ATTACHING SUBSTANCES TO MICRO-ORGANISMS  
FIXATION DE SUBSTANCES A DES MICRO-ORGANISMES

Patent Applicant/Assignee:

RIJKSUNIVERSITEIT GRONINGEN,  
BUIST Girbe,  
LEENHOUTS Cornelis Johannes,  
VENEMA Gerard,  
KOK Jan,

Inventor(s):

BUIST Girbe,  
LEENHOUTS Cornelis Johannes,  
VENEMA Gerard,  
KOK Jan,

Patent and Priority Information (Country, Number, Date):

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Priority Application: EP 97203539 19971113

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FI GB GD GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV  
MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG  
US UZ VN YU ZW GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT  
BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA  
GN GW ML MR NE SN TD TG  
Publication Language: English  
Fulltext Word Count: 15301

#### English Abstract

The invention relates to surface display of proteins on micro-organisms via the targeting and anchoring of heterologous proteins to the outer surface of cells such as yeast, fungi, mammalian and plant cells, and bacteria. The invention provides a proteinaceous substance comprising a reactive group and at least one attaching peptide which comprises a stretch of amino acids having a sequence corresponding to at least a part of the consensus amino acid sequence listed in figure 10 and comprises a method for attaching a proteinaceous substance to the cell wall of a micro-organism comprising the use of said attaching peptide.

#### French Abstract

Cette invention a trait a une technique permettant de faire apparaitre des proteines a la surface de micro-organismes par ciblage de proteines heterologues et ancrage de celles-ci a la surface exterieure de cellules, notamment des levures, des cellules de champignons, de vegetaux et de mammiferes, ainsi qu'a la surface exterieure de bacteries. Elle concerne egalement une substance proteinique possedant un groupe reactif et au moins un peptide de fixation qui comporte une extension d'acides amines possedant une sequence correspondant a au moins une partie de la sequence consensus aminoacide representee dans la figure 10. L'invention porte, de surcroit, sur une technique permettant de fixer une substance proteinique a la paroi cellulaire d'un micro-organisme en faisant intervenir ledit peptide de fixation.

6/3,AB/27 (Item 8 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00437964

CLONING A COLD-INDUCIBLE LACTOCOCCUS GENE AND ITS PROMOTER, AND THEIR USES  
CLONAGE D'UN GENE DE LACTOCOCCUS INDUCTIBLE PAR LE FROID ET DE SON  
PROMOTEUR, ET LEURS UTILISATIONS

#### Patent Applicant/Assignee:

INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE (INRA),  
CHAPOT-CHARTIER Marie-Pierre,  
SCHOULER Catherine,  
CHOPIN Marie-Christine,

#### Inventor(s):

CHAPOT-CHARTIER Marie-Pierre,  
SCHOULER Catherine,  
CHOPIN Marie-Christine,

#### Patent and Priority Information (Country, Number, Date):

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Application: WO 97FR2359 19971219 (PCT/WO FR9702359)  
Priority Application: FR 9615731 19961220

Designated States: AL AU BA BB BG BR CA CN CU CZ EE GE GH HU ID IL IS JP KP  
KR LC LK LR LT LV MG MK MN MX NO NZ PL RO SG SI SK SL TR TT UA US UZ VN  
YU ZW GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH DE  
DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE  
SN TD TG

Publication Language: French

Fulltext Word Count: 7025

#### English Abstract

The invention concerns cold-inducible %lactic% bacteria gene and its promoter. It concerns in particular the cspB gene of the lactococcus, and of the promoter of said gene. The gene is useful particularly for making %lactic% bacteria more resistant to cold, and the promoter is useful particularly for the inducible expression of genes of interest in the lactococci, for instance the inducible expression of genes causing bacterial lysis.

#### French Abstract

L'invention est relative a un gene de bacterie lactique inductible par le froid et a son promoteur. Il s'agit en particulier du gene cspB d'un lactocoque, et du promoteur dudit gene. Le gene est utilisable en particulier pour rendre des bacteries lactiques plus resistantes au

froid, et le promoteur est utilisable en particulier pour l'expression inductible de genes d'interet chez les lactocoques, par exemple pour l'expression inductible de genes provoquant la lyse bacterienne.

6/3,AB/28 (Item 9 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00397844

METHODS FOR PRODUCING DAIRY PRODUCTS, IN PARTICULAR CHEESE USING %LACTIC% ACID BACTERIA PROVIDED WITH ADDITIONAL NEUTRAL PROTEASE ACTIVITY  
PROCEDE DE PRODUCTION DE PRODUITS LAITIERS, NOTAMMENT DE FROMAGE, A PARTIR DE BACTERIES D'ACIDE LACTIQUE POSSEDANT UNE ACTIVITE COMPLEMENTAIRE DE PROTEASE NEUTRE

Patent Applicant/Assignee:

FRIESLAND BRANDS B V,  
MIERAU Igor,  
VAN DEN BURG Lambertus,  
KOK Jan,  
VENEMA Gerhardus,

Inventor(s):

MIERAU Igor,  
VAN DEN BURG Lambertus,  
KOK Jan,  
VENEMA Gerhardus,

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Priority Application: NL 96200948 19960415

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FI GB GE GH HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN  
MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG US UZ VN YU GH  
KE LS MW SD SZ UG AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB  
GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 9896

English Abstract

The present invention relates to a method for carrying out a process of biotransformation of a substrate whereby at least one %lactic% acid bacterium comprising a gene encoding a neutral protease having an altered resulting activity, e.g. a neutral protease having an altered stability and/or specificity, is used. Further, a food product, e.g. a cheese, obtainable by the said method is disclosed.

French Abstract

Cette invention concerne un procede permettant de realiser un processus de transformation biologique d'un substrat. Ce procede fait appel a une ou plusieurs bacteries d'acide lactique, lesquelles comprennent un gene qui code une protease neutre possedant une activite finale modifiee comme, par exemple, une protease neutre possedant une stabilite et/ou une specificite modifiee. Cette invention concerne egalement un produit alimentaire, tel que du fromage, obtenu d'apres ce procede.

6/3,AB/29 (Item 10 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00313409

PROCESS FOR INHIBITING THE GROWTH OF A CULTURE OF %LACTIC% ACID BACTERIA, AND OPTIONALLY LYSING THE BACTERIAL CELLS, AND USES OF THE RESULTING LYSED CULTURE

PROCEDE D'INHIBITION DE LA CROISSANCE D'UNE CULTURE DE BACTERIES LACTIQUES, ET EVENTUELLEMENT DE LYSE DES CELLULES BACTERIENNES, ET APPLICATIONS DE LA CULTURE LYSEE AINSI OBTENUE

Patent Applicant/Assignee:

QUEST INTERNATIONAL B V,

NAUTA Arjen,  
VENEMA Gerard,  
KOK Jan,  
LEDEBOER Aat M,  
Inventor(s):  
NAUTA Arjen,  
VENEMA Gerard,  
KOK Jan,  
LEDEBOER Aat M,  
Patent and Priority Information (Country, Number, Date):  
Patent: WO 9531562 A1 19951123  
Application: WO 95NL171 19950512 (PCT/WO NL9500171)  
Priority Application: NL 94201354 19940512  
Designated States: AU JP US AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE  
Publication Language: English  
Fulltext Word Count: 14276

#### English Abstract

The invention provides a process for inhibiting the growth of a culture of %lactic% acid bacteria, or a product containing such culture e.g. a cheese product, in which in the cells of the %lactic% acid bacteria a holin obtainable from bacteriophages of Gram-positive bacteria, esp. from bacteriophages of %lactic% acid bacteria is produced in situ, the gene encoding said holin being under control of a first regulatable promoter, said holin being capable of exerting a bacteriostatic effect on the cells in which it is produced by means of a system, whereby the cell membrane is perforated, while preferably the natural production of autolysin is not impaired. It is preferable that additionally a lysin obtainable from %lactic% acid bacteria or their bacteriophages is produced in situ in the cells of the %lactic% acid bacteria, the gene encoding said lysin being under control of a second regulatable promoter, whereby the produced lysin effects lysis of the cells of the %lactic% acid bacteria. The second regulatable promoter can be the same as the first regulatable promoter and the genes encoding the holin and the lysin, respectively can be placed under the same regulatable promoter in one operon. Preferably the promoters are regulatable by the food-grade ingredients or parameters. Other uses of the invention include preparing a mixture of peptides which are modified by peptidases freed after the lysis, using the lysed culture as a bactericidal agent against spoiling bacteria or pathogenic bacteria for improving the shelf life of a product containing the lysed culture.

#### French Abstract

Procede d'inhibition de la croissance d'une culture de bacteries lactiques, ou d'un produit renfermant une telle culture, par exemple un produit fromager, selon lequel on produit in situ dans les cellules des bacteries lactiques une holine que l'on peut obtenir a partir des bacteriophages de bacteries a Gram positif, et notamment a partir des bacteriophages des bacteries lactiques, le gene codant ladite holine etant sous la commande d'un premier promoteur regulable, et ladite holine etant apte a agir de maniere bacteriostatique sur les cellules dans lesquelles elle est produite, au moyen d'un systeme selon lequel la membrane cellulaire est perforee, de preference sans que la production naturelle d'autolysine ne soit entravee. De preference, on produit egalement in situ dans les cellules des bacteries lactiques une lysine que l'on peut obtenir a partir des bacteries lactiques ou de leurs bacteriophages, le gene codant ladite lysine etant sous la commande d'un second promoteur regulable, et la lysine ainsi produite provoque la lyse des cellules des bacteries lactiques. Le second promoteur regulable peut etre identique au premier, et les genes codant respectivement la holine et la lysine peuvent se placer sous un meme promoteur regulable dans un seul et unique operon. Les promoteurs sont de preference regulables par des parametres ou ingredients de qualite alimentaire. Le procede s'applique egalement a la preparation d'un melange de peptides modifies par des peptidases liberees a la suite de la lyse, a l'aide de la culture lysee servant d'agent bactericide dirige contre les bacteries perturbatrices ou pathogenes dans le but d'ameliorer la duree de conservation d'un produit renfermant la culture lysee.

6/3,AB/30 (Item 11 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00313408

PROCESS FOR THE LYSIS OF A CULTURE OF %LACTIC% ACID BACTERIA BY MEANS OF A  
LYSIN, AND USES OF THE RESULTING LYSED CULTURE  
PROCEDE DE LYSE D'UNE CULTURE DE BACTERIES LACTIQUES A L'AIDE D'UNE LYSINE,  
ET APPLICATIONS DE LA CULTURE LYSEE AINSI OBTENUE

Patent Applicant/Assignee:

QUEST INTERNATIONAL B V,  
BUIST Girbe,  
VENEMA Gerard,  
KOK Jan,  
LEDEBOER Aat M,

Inventor(s):

BUIST Girbe,  
VENEMA Gerard,  
KOK Jan,  
LEDEBOER Aat M,

Patent and Priority Information (Country, Number, Date):

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Priority Application: AT 394201353 19940512

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Publication Language: English

Fulltext Word Count: 23360

#### English Abstract

The invention provides a process for the lysis of a culture of %lactic% acid bacteria, or a product containing such culture e.g. cheese, by means of a lysin through the in situ production of a homologous autolysin, or a heterologous autolysin obtainable from Gram-positive bacteria esp. from %lactic% acid bacteria. The gene encoding said autolysin is controlled by a promoter, preferably regulated by food-grade ingredients or parameters, to achieve an enhanced lysis after induction resulting in an enhanced production of total autolysin compared with the natural production level of the homologous autolysin during fermentation or shortly thereafter. Other uses of the invention include preparing a mixture of peptides which are modified by peptidases freed after the lysis, using the autolysin as a bactericidal agent against spoiling bacteria or pathogenic bacteria for improving the shelf life of a product containing the lysed culture.

#### French Abstract

Procédé de lyse d'une culture de bactéries lactiques, ou d'un produit renfermant une telle culture, par exemple du fromage, à l'aide d'une lysine et au moyen de la production in situ d'une autolysine homologue ou d'une autolysine hétérologue que l'on peut obtenir à partir de bactéries à Gram positif, et notamment à partir de bactéries lactiques. Le gène codant ladite autolysine est commandé par un promoteur, de préférence régulé par des paramètres ou ingrédients de qualité alimentaire, afin d'assurer une lyse améliorée après induction entraînant une production améliorée d'autolysine totale par rapport au taux de production naturelle de l'autolysine homologue pendant la fermentation ou peu après celle-ci. Le procédé s'applique également à la préparation d'un mélange de peptides modifiés par des peptidases libérées à la suite de la lyse, à l'aide de ladite autolysine servant d'agent bactéricide dirigé contre les bactéries perturbatrices ou pathogènes, dans le but d'améliorer la durée de conservation d'un produit renfermant la culture lysée.

6/3,AB/31 (Item 12 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00278705

PROLINE IMINOPEPTIDASE, PROCESS FOR ITS PREPARATION AND ITS USE IN THE  
FLAVOURING OF FOOD COMPOSITIONS

PROCEDE DE PREPARATION DE PROLINE-IMINOPEPTIDASE ET SON UTILISATION DANS  
L'AROMATISATION DE COMPOSITIONS ALIMENTAIRES

Patent Applicant/Assignee:

QUEST INTERNATIONAL B V,  
BOOT Jacobus,  
DEUTZ Inge Elisabeth M,  
LEDEBOER Adrianus Marinus,  
LEENHOUTS Cornelis Johannes,  
TOONEN Maria Yvonne,

Inventor(s):

BOOT Jacobus,  
DEUTZ Inge Elisabeth M,  
LEDEBOER Adrianus Marinus,  
LEENHOUTS Cornelis Johannes,  
TOONEN Maria Yvonne,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9426882 A1 19941124  
Application: WO 94EP1497 19940509 (PCT/WO EP9401497)  
Priority Application: NL 93201421 19930518

Designated States: AT AU BB BG BR BY CA CH CN CZ DE DK ES FI GB GE HU JP KG

KP KR KZ LK LU LV MD MG MN MW NL NO NZ PL PT RO RU SD SE SI SK TJ TT UA  
US UZ VN AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI  
CM GA GN ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 10557

English Abstract

A novel proline iminopeptidase which is a metal dependent serine peptidase, which is obtainable from *Propionibacterium shermanii* ATCC 9617 and which has a calculated molecular mass of 45 kDa. The proline iminopeptidase has an amino acid sequence according to the unique sequence of Figure 3. Genetic variants having a homology exceeding 60 % and having the same functionality are comprised by the invention. The proline iminopeptidase can be prepared in large quantities with the use of a genetically modified microorganism. It is used for modifying the flavour of food products, and in particular for rendering the product less bitter.

French Abstract

L'invention concerne une nouvelle proline-iminopeptidase constituant une serine-peptidase dependant d'un metal, obtenue a partir de *Propionibacterium shermanii* ATCC 9617 et presentant une masse molaire calculee de 45 kDa. La proline-iminopeptidase comprend une sequence d'acides-amino conformement a la sequence unique de la figure 3. L'invention porte egalement sur des variantes genetiques presentant une homologie depassant 60 %, et la meme fonctionnalite. La proline-iminopeptidase peut etre preparee en grandes quantites a l'aide d'un microorganisme manipule genetiquement. Elle est utilisee pour modifier l'arome de produits alimentaires, et plus particulierement pour rendre lesdits produits moins amers.

6/3,AB/32 (Item 13 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT  
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00270156

IMMOBILIZED PROTEINS WITH SPECIFIC BINDING CAPACITIES AND THEIR USE IN  
PROCESSES AND PRODUCTS

PROTEINES IMMOBILISEES A CAPACITES DE FIXATION SPECIFIQUE ET LEUR  
UTILISATION DANS DIVERS PROCEDES ET PRODUITS

Patent Applicant/Assignee:

UNILEVER PLC,  
UNILEVER N V,  
FRENKEN Leon Gerardus J,  
DE GEUS Pieter,  
KLIS Franciscus Maria,  
TOSCHKA Holger York,  
VERRIPS Cornelis Theodorus,



Inventor(s) :

FRENKEN Leon Gerardus J,  
DE GEUS Pieter,  
KLIS Franciscus Maria,  
TOSCHKA Holger York,  
VERRIPS Cornelis Theodorus,

Patent and Priority Information (Country, Number, Date):

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Application: WO 94EP427 19940210 (PCT/WO EP9400427)  
Priority Application: NL 93200350 19930210

Designated States: AT AU BB BG BR BY CA CH CN CZ DE DK ES FI GB HU JP KP KR  
KZ LK LU LV MG MN MW NL NO NZ PL PT RO RU SD SE SK UA US UZ VN AT BE CH  
DE DK ES FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE  
SN TD TG

Publication Language: English

Fulltext Word Count: 16226

English Abstract

A method is provided for immobilizing a binding protein capable of binding to a specific compound, using recombinant DNA techniques for producing said binding protein or a functional part thereof. The binding protein is immobilized by producing it as part of a chimeric protein also comprising an anchoring part derivable from the C-terminal part of an anchoring protein, thereby ensuring that the binding protein is localized in or at the exterior of the cell wall of the host cell. Suitable anchoring proteins are yeast alpha-agglutinin, FLO1 (a protein associated with the flocculation phenotype in *S. cerevisiae*), the Major Cell Wall Protein of lower eukaryotes, and a proteinase of lactic acid bacteria. For secretion the chimeric protein can comprise a signal peptide including those of alpha-mating factor of yeast, alpha-agglutinin of yeast, invertase of *Saccharomyces*, inulinase of *Kluyveromyces*, alpha-amylase of *Bacillus*, and proteinase of lactic acid bacteria. Also provided are recombinant polynucleotides encoding such chimeric protein, vectors comprising such polynucleotide, transformed microorganisms having such chimeric protein immobilized on their cell wall, and a process for carrying out an isolation process by using such transformed host, wherein a medium containing said specific compound is contacted with such host cell to form a complex, separating said complex from the medium and, optionally, releasing said specific compound from said binding protein.

French Abstract

L'invention concerne un procede d'immobilisation d'une proteine fixatrice capable de se fixer a un compose specifique, par genie genetique, afin de produire ladite proteine fixatrice ou une partie fonctionnelle de celle-ci. On immobilise la proteine fixatrice en la produisant sous la forme d'une partie de la proteine chimere comprenant egalement une partie d'ancrage pouvant etre derivee de la partie C-terminale d'une proteine d'ancrage, assurant ainsi que ladite proteine fixatrice est localisee dans ou a l'exterieur de la paroi cellulaire de la cellule hote. On peut citer a titre de proteines d'ancrage appropriees l'alpha-agglutinine de levure, , la FLO1 (une proteine associee au phenotype de flocculation dans *S. cerevisiae*, la proteine majeure de la paroi cellulaire d'eucaryocytes inferieurs, ainsi qu'une proteinase de bacteries d'acide lactique. Pour les secretions, la proteine chimere peut comprendre un peptide constituant un signal, ladite proteine etant selectionnee dans un groupe comprenant un facteur d'alpha-appariement de levure, l'alpha-agglutinine de levure, l'invertase de *Saccharomyces*, l'insulinase de *Kluyveromyces*, l'alpha-amylase de *Bacillus*, ainsi que la proteinase de bacteries d'acide lactique. L'invention concerne egalement des polynucleotides recombinés codant ladite proteine chimere, des vecteurs comprenant ledit polynucleotide, des micro-organismes transformes presentant ladite proteine chimere immobilisee sur leur paroi cellulaire, ainsi qu'un procede de mise en oeuvre d'un processus d'isolement par l'utilisation dudit hote transforme, dans lequel on met un milieu contenant ledit compose specifique en contact avec ladite cellule hote afin de former un complexe, la separation dudit complexe du milieu, et facultativement la liberation dudit compose specifique de ladite proteine fixatrice.

00258754

PRODUCTION OF DESIRED PROTEINS OR POLYPEPTIDES BY CULTURING A TRANSFORMED  
%LACTIC% ACID BACTERIUM

PRODUCTION DE PROTEINES OU DE POLYPEPTIDES SOUHAITES PAR MISE EN CULTURE  
D'UNE BACTERIE D'ACIDE LACTIQUE TRANSFORMEE

Patent Applicant/Assignee:

UNILEVER PLC,  
UNILEVER N V,  
SEEGERS Jozef Franciscus M L,  
KIEWIET Rense,  
VENEMA Gerard,  
BRON Sierd,

Inventor(s):

SEEGERS Jozef Franciscus M L,  
KIEWIET Rense,  
VENEMA Gerard,  
BRON Sierd,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9406917 A1 19940331  
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Priority Application: AT 192202869 19920918

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LK LU MG MN MW NL NO NZ PL PT RO RU SD SE SK UA US VN AT BE CH DE DK ES  
FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

Publication Language: German

Fulltext Word Count: 21999

#### English Abstract

The invention provides a food-grade recombinant plasmid comprising (1) a replicon and DNA sequences derived from a %lactic% acid bacterium (LAB), required for stable maintenance in a LAB, preferably derived from plasmid pWVO2 from *L. lactis* subsp. *cremoris* Wg2, and (2) a structural gene encoding a desired protein or polypeptide or its precursor, not being an antibiotic resistance selection marker, and optionally (3) a food-grade selection marker, whereby said plasmid has a theta-replication mechanism and is stably maintained in the transformed LAB under non-selective conditions. Also provided is a LAB transformed by said recombinant plasmid and the use of such transformed LAB in a process for producing said protein or polypeptide. Said recombinant plasmid can also be used for modifying the metabolic pathway of a LAB, e.g. for producing diacetyl or a precursor thereof by a LAB. Also claimed are food and animal feed products obtained by incorporating therein said protein or polypeptide or precursor thereof produced by said transformed LAB.

#### French Abstract

L'invention decrit un plasmide recombinant de qualite alimentaire comprenant premierement un replicon et des sequences d'ADN derives d'une bacterie d'acide lactique (BAL), necessaire a un maintien stable dans une BAL, de preference derive du plasmide pWVO2 provenant de *L. lactis* sous-espece *cremoris* Wg2, et deuxiemement un gene structural encodant une proteine ou un polypeptide souhaitees ou bien leur precurseur, n'etant pas un marqueur de selection de resistance aux antibiotiques et, eventuellement troisiemement un marqueur de selection de qualite alimentaire, ledit plasmide possedant de ce fait un mecanisme de replication theta et etant maintenu de maniere stable dans la BAL transformee dans des conditions non selectives. Sont egalement decrits une BAL transformee par ledit plasmide recombinant, ainsi que l'utilisation de cette BAL transformee dans un procede pour produire ladite proteine ou ledit polypeptide. Ledit plasmide recombinant peut egalement s'utiliser pour modifier la chaine metabolique d'une BAL, par exemple pour produire du diacetyyle ou bien son precurseur a l'aide d'une BAL. Sont egalement revendiques des produits alimentaires et de la nourriture pour animaux obtenus par incorporation dans ceux-ci de ladite proteine ou dudit polypeptide ou bien de leur precurseur produits par

ladite BAL transformee.

6/3,AB/34 (Item 15 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00184722

MODIFIED PROTEASES AND THEIR USE IN FOODSTUFFS  
PROTEASES MODIFIEES ET LEUR UTILISATION DANS LES DENREES ALIMENTAIRES

Patent Applicant/Assignee:

NEDERLANDS INSTITUUT VOOR ZUIVELONDERZOEK,  
VOS Petrus Antonius Josephina,  
SIEZEN Roelant Jan,  
DE VOS Willem Meindert,  
KOK Jan,  
VENEMA Gerhardus,  
HAANDRIKMAN Alfred Jacques,

Inventor(s):

VOS Petrus Antonius Josephina,  
SIEZEN Roelant Jan,  
DE VOS Willem Meindert,  
KOK Jan,  
VENEMA Gerhardus,  
HAANDRIKMAN Alfred Jacques,

Patent and Priority Information (Country, Number, Date):

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Application: WO 90EP1302 19900802 (PCT/WO EP9001302)  
Priority Application: NL 892010 19890804

Designated States: AT AU BE CA CH DE DK ES FR GB IT JP LU NL SE US

Publication Language: English

Fulltext Word Count: 9159

#### English Abstract

The invention relates to DNA fragments containing at least one "mutant protease gene", which "mutant protease gene" is understood to mean: a gene made up of sections of parent protease genes of several lactococcal strains, in particular of the parent protease genes of *L.lactis* subsp. *cremoris* Wg2 and *L.lactis* subsp. *cremoris* SK11, as well as a parent protease gene of a lactococcal strain, in particular the parent protease gene of *L.lactis* subsp. *cremoris* Wg2 or the parent protease gene of *L.lactis* subsp. *cremoris* SK11, the DNA sequence of which has been altered in a manner such that in the mutant protease for which the gene codes: (a) an amino acid other than that of the "wild-type" protease is present at at least one site, and/or (b) at at least one site within the first 1350 residues of the amino acid sequence, calculated from the N-terminus, at least one amino acid of the "wild-type" protease is missing and/or one or more amino acids have been inserted, or (c) at at least two sites separated from each other, one or more amino acids are missing and/or one or more amino acids have been inserted, the cloning vectors containing such a DNA fragment, the transformed host strains containing such a DNA fragment or vector, the mutant proteases obtainable as well as the foodstuffs and flavourings produced with the host strains or mutant proteases meant above.

#### French Abstract

Fragment d'ADN contenant au moins un "gene de protease mutante", ledit "gene de protease mutante" comprenant: un gene compose de sections de genes de proteases genitrices de plusieurs souches lactococciques, notamment des genes de proteases genitrices de la sous espece *cremoris* Wg2 de *L.lactis* et de la sous-espece *cremoris* SK11 de *L.lactis*, ainsi qu'un gene de protease genitrice d'une souche lactococcique, notamment le gene de protease genitrice de la sous-espece *cremoris* Wg2 de *L.lactis* ou le gene de protease genitrice de la sous-espece *cremoris* SK11 de *L.lactis*, dont la sequence d'ADN a ete modifiee de sorte que la protease mutante pour laquelle le gene code: (a) un acide amine different de la protease de "type sauvage" est present au moins sur un site, et/ou (b) sur au moins un site se trouvant dans les premiers 1350 residus de la sequence d'acides amines, calcules a partir de la terminaison N, au moins

un acide amine de la protease de "type sauvage" est manquant et/ou un ou plusieurs acides amines ont ete inseres, ou (c) sur au moins deux sites separes l'un de l'autre, un ou plusieurs acides amines sont manquants et/ou le ou les acides amines ont ete inseres, les vecteurs de clonage contenant ledit fragment d'ADN, les souches hautes transformees contenant ledit fragment d'ADN ou ledit vecteur, les proteases mutantes pouvant etre obtenues ainsi que les produits alimentaires et les aromes produits a l'aide des souches hautes ou des proteases mutantes precitees.

6/3,AB/35 (Item 1 from file: 357)  
DIALOG(R)File 357:Derwent Biotech Res.  
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0220667 DBR Accession No.: 98-02264 PATENT  
Recombinant Lactobacillus bulgaricus %Prtp% protease - expression in a Lactococcus, Streptococcus, Lactobacillus or Bifidobacterium sp., for use as a starter culture  
AUTHOR: Mollet B; Germond J E; Lapiere L  
CORPORATE SOURCE: Vevey, Switzerland.  
PATENT ASSIGNEE: Nestle 1997  
PATENT NUMBER: EP 810289 PATENT DATE: 971203 WPI ACCESSION NO.: 98-011060 (9802)  
PRIORITY APPLIC. NO.: EP 96201495 APPLIC. DATE: 960529  
NATIONAL APPLIC. NO.: EP 96201495 APPLIC. DATE: 960529  
LANGUAGE: English  
ABSTRACT: The following are claimed: a recombinant Lactobacillus bulgaricus %Prtp% protease sequence of 1946 amino acids (and functional derivatives); the prepro portion (amino acids 1-192) and the anchorage portion (amino acids 1883 to at least 1915); DNA encoding either the protease, prepro or anchorage portions; an L. bulgaricus %Prtp% gene promoter with nucleotides 588-793 of a 7156 bp sequence; and a recombinant cell expressing the protease, prepro and/or anchorage portions, or containing the promoter. The recombinant cell may be a Lactococcus, Lactobacillus, Streptococcus or Bifidobacterium sp., and may be used to produce the protease, or may be used in the manufacture of fermented dairy products, e.g. yogurt, acidulated milk and cheese, especially where (a) the cell expresses a recombinant %Prtp% protease derivative that is temp.- or pH-sensitive, preferably having no more than 80% wild-type protease activity under storage conditions, and at least 90% wild-type protease activity under fermentation conditions, or (b) the cell contains the protease-encoding DNA under the control of a temp.- or pH-sensitive promoter. (28pp)

6/3,AB/36 (Item 2 from file: 357)  
DIALOG(R)File 357:Derwent Biotech Res.  
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0216708 DBR Accession No.: 97-11829  
Casein and peptide degradation in %lactic% acid bacteria - potential Lactococcus lactis starter culture strain improvement; a review  
AUTHOR: Mierau I; Kunji E R S; Venema G; Kok J  
CORPORATE AFFILIATE: Univ.Groningen-Inst.Biomol.Sci.Biotechnol.  
CORPORATE SOURCE: Snow Brand European Research Laboratories, B.V., Zernikepark 6, 9747AN Groningen, The Netherlands.  
JOURNAL: Biotechnol.Genet.Eng.Rev. (14, 279-301) 1996  
ISSN: 0264-8725 CODEN: BGERES  
LANGUAGE: English  
ABSTRACT: Casein and peptide degradation in %lactic% acid bacteria is reviewed with respect to: the extracellular protease (the enzyme, specificity of %Prtp% - a cell envelope-associated serine protease, genetics of %prtp% and prtM); transport of peptides and amino acids (the oligopeptide transport system, di/tripeptide transport systems, amino acid transport, role of peptide transport in growth of L. lactis in milk); the peptidases of L. lactis (peptidase gene cloning, cellular localization of peptidases, analyses of the function of lactococcal peptidases in vivo, multiple peptidase mutants); the proteolytic system of other %lactic% acid bacteria; and the role of

proteolytic system of *L. lactis* in cheese making. Cloning of the genes of most of the peptidases of *L. lactis* has been achieved. This will allow overexpression of these genes in suitable hosts for potential starter culture strain improvement. (125 ref)

6/3,AB/37 (Item 3 from file: 357)  
DIALOG(R)File 357:Derwent Biotech Res.  
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0154531 DBR Accession No.: 93-12583

Functional analysis of the *Lactococcus lactis* usp45 secretion signal in the secretion of a homologous protease and a heterologous alpha-amylase - use of usp45 promoter and signal peptide for the expression and protein secretion of heterologous products

AUTHOR: van Asseldonk M; de Vos W M; +Simons G

CORPORATE SOURCE: Molecular Genetics Group, Department of Biophysical Chemistry, Netherlands Institute of Dairy Research (NIZO), P.O. Box 20, 6710 BA Ede, The Netherlands.

JOURNAL: Mol.Gen.Genet. (240, 3, 428-34) 1993

CODEN: MGGEAE

LANGUAGE: English

ABSTRACT: To examine whether the expression and protein secretion signals of the *Lactococcus lactis* usp45 gene were capable of directing the expression of other lactococcal genes and secretion of their products, these signals were fused to the prtP gene, encoding the extracellular protease of *L. lactis* SK11. *L. lactis* MG1363 harboring the resulting plasmid, pNZ1052, efficiently secreted PrtP into the culture medium. When pNZ1052 was introduced into MG1363 harboring the compatible plasmid pNZ582 carrying the prtM gene, the resulting strain was able to grow in milk, indicating production of active extracellular protease. The usp45 expression and secretion signals were also fused to the *Bacillus stearothermophilus* amyS gene, devoid of its signal peptide coding sequence. The resulting plasmid, pNZ10-alpha-5, encoded the first 27 amino acids of Usp45 followed by the mature alpha-amylase (EC-3.2.1.3). *L. lactis* MG1363 cells carrying this plasmid produced active alpha-amylase in the supernatant fraction. The first 19, 20 and 27 residues of the Usp45 leader were able to direct alpha-amylase secretion in *Escherichia coli* MC1061, but not in *L. lactis*. (32 ref)

6/3,AB/38 (Item 4 from file: 357)  
DIALOG(R)File 357:Derwent Biotech Res.  
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0151959 DBR Accession No.: 93-10011

Genetics of proteolytic enzymes of lactococci and their role in cheese flavor development - starter culture *Lactococcus* spp. protease gene cloning and manipulation; a review

AUTHOR: Kok J

CORPORATE SOURCE: Department of Molecular Genetics, University of Groningen, Groningen, The Netherlands.

JOURNAL: J.Dairy Sci. (76, 7, 2056-64) 1993

CODEN: JDSCAE

LANGUAGE: English

ABSTRACT: Genetic, biochemical and immunological studies have provided extensive information on the make-up of the proteolytic system of lactococci. The protease structural gene, prtP, encodes a very large preprotease, while a second protein, PrtM, the gene of which is tightly coupled to proP, induces the preprotease to perform an autoproteolytic activation site. Both prtP and prtM are attached to the cell membrane. Examination of the nucleotide sequence of prtP has allowed: (1) the insertion of the genes for prtP and PrtM into the chromosome of *Lactococcus lactis*; (2) the determination of areas of the protease molecule important for enzyme specificity; (3) the construction of hybrid proteases with novel caseinolytic specificities; and (4) the improvement of protease activity by gene cloning methods. Various peptidases have been purified, and the cloning of their genes has allowed the role of these enzymes in cheese flavor development to

be studied and for the enzymes to be over-produced for biochemical studies or for use in new, nondairy applications. The genetic manipulation of lactococci to food-grade standards is imperative for their use in foods. (56 ref)

6/3,AB/39 (Item 5 from file: 357)  
DIALOG(R)File 357:Derwent Biotech Res.  
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0127255 DBR Accession No.: 91-14897

Analysis of secretion signals of lactococci - *Lactococcus lactis* subsp. *lactis*, *L. lactis* subsp. *cremoris* signal peptide, protein secretion, vector construction, and recombinant alpha-amylase secretion (conference paper)

AUTHOR: Simons G; van Asseldonk M; Rutten G; Nijhuis M; Hornes M; de Vos W M

CORPORATE SOURCE: Molecular Genetics Group, Department of Biophysical Chemistry, Netherlands Institute for Dairy Research (NIZO), PO Box 20, 6710 BA EDE, The Netherlands.

JOURNAL: Eur.Congr.Biotechnol. (5 Meet., 290-93) 1990

CODEN: 9999X

LANGUAGE: English

ABSTRACT: Extracellular proteins of lactococci (*Lactococcus lactis* subsp. *lactis* and *L. lactis* subsp. *cremoris*), their secretion signals, and heterologous alpha-amylase (EC-3.2.1.1) secretion, were described. Proteins secreted by lactococci include protease and peptidase enzymes involved in milk proteolysis, and bacteriocins such as nisin. Despite a lack of primary sequence homology among the signal peptide sequences, they all show the following characteristics: an average length of 15-35 amino acids (AAs) consisting of several basic AAs at the N-terminus followed by a hydrophobic core of 15-20 AAs and a shorter uncharged region ending with AAs carrying a small side chain at positions -3 and -1 relative to the cleaved peptide bond. Based on the regulatory sequences of the *prtP* gene (encoding protease) and the *usp45* gene (encoding a 434 AA protein of *L. lactis* MG1363), secretion vectors were constructed which contained the replication origin of *L. lactis* plasmid pSH71. *Bacillus stearothermophilus* alpha-amylase was expressed in *L. lactis* MG1363 and all the alpha-amylase activity was detected in the extracellular medium. (9 ref)

6/3,AB/40 (Item 1 from file: 654)  
DIALOG(R)File 654:US PAT.FULL.  
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4377613

Derwent Accession: 1994-279751

Utility

C/ Immobilized proteins with specific binding capacities and their use in processes and products

; IMMOBILIZING PROTEIN BY MODIFYING A FUNGUS TO PRODUCE A CHIMERIC PROTEIN COMPOSED OF A BINDING PROTEIN, A SECRETORY SIGNAL PEPTIDE, AND AN ANCHORING PORTION; PRODUCING PROTEIN; TRANSPORTING TO CELL WALL; FOR SEPARATING TARGET COMPOUNDS

Inventor: Frenken, Leon Gerardus J., Rotterdam, NL  
de Geus, Pieter, Barendrecht, NL  
Klis, Franciscus Maria, Amsterdam, NL  
Toschka, Holger York, Reken, DE  
Verrips, Cornelis Theodorus, Maassluis, NL

Assignee: Unilever Patent Holdings (03), NL  
Unilever Patent Holdings B V NL (Code: 17055)

Examiner: Myers, Carla J. (Art Unit: 164)

Assistant Examiner: Johannsen, Diana

Law Firm: Cushman Darby & Cushman IP Group of Pillsbury Madison & Sutro

Publication Number	Kind	Date	Application Number	Filing Date
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Continuation	Pending			US 492114	
PCT	WO 9418330		19940818	WO 94EP427	19940210
			371:19951101		
			102e:19951101		
Priority				NL 93200350	19930210

Fulltext Word Count: 8951

**Abstract:**

A method is provided for immobilizing a binding protein capable of binding to a specific compound, using recombinant DNA techniques for producing said binding protein or a functional part thereof. The binding protein is immobilized by producing it as part of a chimeric protein also comprising an anchoring part derivable from the C-terminal part of an anchoring protein, thereby ensuring that the binding protein is localized in or at the exterior of the cell wall of the host cell. Suitable anchoring proteins are yeast [alpha]-agglutinin, FLO1 (a protein associated with the flocculation phenotype in *S. cerevisiae*), the Major Cell-Wall Protein of lower eukaryotes, and a proteinase of lactic acid bacteria. For secretion the chimeric protein can comprises a signal peptide including those of [alpha]-mating factor of yeast, [alpha]-agglutinin of yeast, invertase of *Saccharomyces*, inulinase of *Kluyveromyces*, [alpha]-amylase of *Bacillus*, and proteinase of lactic acid bacteria. Also provided are recombinant polynucleotides encoding such chimeric protein, vectors comprising such polynucleotide, transformed microorganisms having such chimeric protein immobilized on their cell wall, and a process for carrying out an isolation process by using such transformed host, wherein a medium containing said specific compound is contacted with such host cell to form a complex, separating said complex from the medium and, optionally, releasing said specific compound from said binding protein.

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 DIALOG(R) File 654:US PAT.FULL.  
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4201686

Derwent Accession: 1996-010946

Utility

REASSIGNED

C/ Process for the lysis of a culture of lactic acid bacteria by means of a lysin, and uses of the resulting lysed culture

; USING HOMOLOGOUS AND HETEROLOGOUS PROTEOLYTIC ENZYMES FROM GRAM POSITIVE LACTOBACILLUS TO DISRUPT BACTERIAL CELL IN CULTURE; BACTERICIDES; TO PREVENT FOOD SPOILAGE AND IMPROVING SELF LIFE;FOOD PROCESSING OF CHEESE

Inventor: Buist, Girbe, Groningen, NL

Venema, Gerard, Haren, NL

Kok, Jan, Groningen, NL

Ledeboer, Adrianus Marinus, ML Rotterdam, NL

Assignee: Quest International B.V. (03), Naarden, NL

Quest International B V NL (Code: 37332)

Examiner: Ketter, James (Art Unit: 166)

Assistant Examiner: Sandals, William

Law Firm: Pillsbury Madison & Sutro LLP

	Publication Number	Kind	Date	Application Number	Filing Date
Main Patent	US 5955258	A	19990921	US 97737716	19970422
PCT	WO 9531561		19951123	WO 95NL170	19950512
			371:19970422		
			102e:19970422		
Priority				EP 94201353	19940512

Fulltext Word Count: 16099

Abstract:

The invention provides a process for the lysis of a culture of %lactic% acid bacteria, or a product containing such culture e.g. cheese, by means of a lysin through the in situ production of a homologous autolysin, or a heterologous autolysin obtainable from Gram-positive bacteria esp. from %lactic% acid bacteria. The gene encoding said autolysin is controlled by a promoter, preferably regulated by food-grade ingredients or parameters, to achieve an enhanced lysis after induction resulting in an enhanced production of total autolysin compared with the natural production level of the homologous autolysin during fermentation or shortly thereafter. Other uses of the invention include preparing a mixture of peptides which are modified by peptidases freed after the lysis, using the autolysin as a bactericidal agent against spoiling bacteria or pathogenic bacteria for improving the shelf life of a product containing the lysed culture.

6/3,AB/42 (Item 3 from file: 654)  
DIALOG(R)File 654:US PAT.FULL.  
(c) FORMAT ONLY 2003 THE DIALOG CORP. All rts. reserv.

4184408

Derwent Accession: 1997-235899

Utility

C/ Use of a Sec-dependent secretion system for secreting proteins that are usually secreted by a Sec-independent secretion system, bacteria containing it and their use

; NUCLEIC ACID CONSTRUCT HAVING PROMOTER, SIGNAL SEQUENCE, NUCLEOTIDE SEQUENCE CODING FOR MATURE PROTEIN, AND TERMINATOR; DOES NOT CONTAIN MULTIPLE CLONING SITE; FOR INCREASED PRODUCTION OF PROTEINS ESPECIALLY FOR DAIRY INDUSTRY

Inventor: Fayard, Blandine, Drieborg, NL

Kok, Jan, Groningen, NL

Venema, Gerhardus, Haren, NL

Bigret, Marc, Le Perreux, FR

Prevots, Fabien, Toulouse, FR

Assignee: SKW Biosystems (03), FR

SKW Biosystems FR (Code: 49434)

Examiner: Degen, Nancy (Art Unit: 165)

Assistant Examiner: McGarry, Sean

Law Firm: Ostrolenk, Faber, Gerb & Soffen, LLP

	Publication Number	Kind	Date	Application Number	Filing Date
Main Patent	US 5939317	A	19990817	US 97849373	19970606
PCT	WO 9713863		19970417	WO 96FR1560	19961007
			371:19970606		
			102e:19970606		
Priority				FR 9511778	19951006

Fulltext Word Count: 2527

Abstract:

The invention relates to the use of a Sec-dependent secretion system for secreting proteins normally secreted by a Sec-independent secretion system.

6/3,AB/43 (Item 4 from file: 654)  
DIALOG(R)File 654:US PAT.FULL.  
(c) FORMAT ONLY 2003 THE DIALOG CORP. All rts. reserv.

3996417

Derwent Accession: 1997-021346

Utility

C/ Functional ligands for the axonal cell recognition molecule contactin  
; SCREENING COMPOUNDS FOR THE ABILITY TO ALTER THE EFFECTS OF THE CARBONIC ANHYDRASE DOMAIN OF RECEPTOR-TYPE PHOSPHATASE-BETA ON NEURONAL CELLS



Inventor: Peles, Elior, Foster City, CA  
Assignee: Sugan, Inc. (02), Redwood City, CA  
Sugen Inc (Code: 41101)  
Examiner: Hutzell, Paula K. (Art Unit: 188)  
Assistant Examiner: Krikorian, Jacqueline G.

	Publication Number	Kind	Date	Application Number	Filing Date
Main Patent	US 5766922	A	19980616	US 95452052	19950526

Fulltext Word Count: 12835

Abstract:

The extracellular domain of RPTP[beta] is the ligand for contactin and its binding results in neurite growth and differentiation. The invention encompasses compounds that mimic, enhance, or suppress the effects of the ligand for contactin, assays for the identification of such compounds, and the use of such compounds to treat neurologic diseases including those characterized by insufficient, aberrant, or excessive neurite growth, differentiation or survival.

6/3,AB/44 (Item 5 from file: 654)  
DIALOG(R)File 654:US PAT.FULL.  
(c) FORMAT ONLY 2003 THE DIALOG CORP. All rts. reserv.

3897489  
Derwent Accession: 1997-511871  
Utility  
C/ Compositions and methods for phage resistance in dairy fermentations  
; USING GENETIC ENGINEERED BACTERIA  
Inventor: Broadbent, Jeff R., Smithfield, UT  
Ober, Craig J., Liberty, UT  
Caldwell, Shelby, Syracuse, UT  
Assignee: Utah State University, Office of Technology Commercialization (02), Logan, UT  
Utah State Univ. Foundation (Code: 88030)  
Examiner: Wax, Robert A. (Art Unit: 184)  
Assistant Examiner: Slobodyansky, Elizabeth  
Law Firm: Thorpe North & Western, L.L.P.

	Publication Number	Kind	Date	Application Number	Filing Date
Main Patent	US 5677166	A	19971014	US 95462017	19950605

Fulltext Word Count: 5527

Abstract:

A latococcal- and streptococcal-phage-resistant starter culture for fermenting milk comprises a food-grade bacterium from the genera *Pediococcus*, *Leuconostoc*, *Lactococcus*, *Streptococcus*, or *Lactobacillus* transformed with a genetic element containing genes for a lactose fermentation phenotype. A method of making a lactococcal-phage-resistant starter culture comprises transforming a non-lactose fermenting, food-grade bacterium with a genetic element carrying determinants for a lactose fermentation phenotype. A method of making cheese with lactococcal-phage-resistant starter culture is also disclosed.

6/3,AB/45 (Item 6 from file: 654)  
DIALOG(R)File 654:US PAT.FULL.  
(c) FORMAT ONLY 2003 THE DIALOG CORP. All rts. reserv.

3841803  
Derwent Accession: 1992-176770  
Utility

C/ Food-grade vector suitable for transforming a food-grade host cell use of said vector for transforming food-grade host cells and use of said transformed cells in biotransformation processes

; TRANSFORMING AND REPLICATION OF GENES

Inventor: Leenhouts, Cornelis J., Haren, NL

Marugg, John D., Utrecht, NL

Verrips, Cornelis T., Maassluis, NL

Assignee: Van Den Bergh Foods Co., Division of Conopco Inc. (02), Lisle, IL

Conopco Inc (Code: 23809)

Examiner: Fleisher, Mindy (Art Unit: 185)

Assistant Examiner: Weiss, Bonnie D.

Law Firm: Cushman Darby & Cushman IP Group Pillsbury Madison & Sutro LLP

	Publication Number	Kind	Date	Application Number	Filing Date
Main Patent	US 5627072	A	19970506	US 95368397	19950103
Continuation	Abandoned			US 9332739	19930316
Continuation	Abandoned			US 91795412	19911120
Priority				EP 90203114	19901123

Fulltext Word Count: 9214

Abstract:

A food-grade vector is provided which is suitable for transforming a food-grade host cell and is incapable of replicating autonomously in the host cell due to deletion of the replicase gene.

6/3,AB/46 (Item 1 from file: 348)

DIALOG(R) File 348:EUROPEAN PATENTS

(c) 2003 European Patent Office. All rts. reserv.

01028636

Attaching substances to micro-organisms

Befestigungs-Substanzen an Mikroorganismen

Substances a propriete de fixation sur des microorganismes

PATENT ASSIGNEE:

Rijksuniversiteit te Groningen, (406260), Broerstraat 5, 9712 CP

Groningen, (NL), (applicant designated states:

AT;BE;CH;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)

LEGAL REPRESENTATIVE:

Smulders, Theodorus A.H.J., Ir. et al (21191), Vereenigde Octrooibureaux

Nieuwe Parklaan 97, 2587 BN 's-Gravenhage, (NL)

PATENT (CC, No, Kind, Date): EP 916726 A1 990519 (Basic)

APPLICATION (CC, No, Date): EP 97203539 971113;

PRIORITY (CC, No, Date): EP 97203539 971113

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE

INTERNATIONAL PATENT CLASS: C12N-015/31; C12N-001/20; C07K-014/315;

C07K-014/195; C07K-014/37; C12N-009/36; A61K-038/02; A23L-001/03;

G01N-033/68; B01J-020/00;

ABSTRACT EP 916726 A1

The invention relates to surface display of proteins on micro-organisms via the targeting and anchoring of heterologous proteins to the outer surface of cells such as yeast, fungi, mammalian and plant cells, and bacteria. The invention provides a proteinaceous substance comprising a reactive group and at least one attaching peptide which comprises a stretch of amino acids having a sequence corresponding to at least a part of the consensus amino acid sequence listed in figure 10 and comprises a method for attaching a proteinaceous substance to the cell wall of a micro-organism comprising the use of said attaching peptide.

ABSTRACT WORD COUNT: 100

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text Language Update Word Count

CLAIMS A (English)	9920	475
SPEC A (English)	9920	12958
Total word count - document A		13433
Total word count - document B		0
Total word count - documents A + B		13433

6/3,AB/47 (Item 2 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2003 European Patent Office. All rts. reserv.

00885229

Starter strains expressing a protease of Lactobacillus bulgaricus  
Starterkulturen die eine Protease von Lactobacillus bulgaricus exprimieren  
Ferment a base de bacteries exprimant une protease de Lactobacillus  
bulgaricus

PATENT ASSIGNEE:

SOCIETE DES PRODUITS NESTLE S.A., (229220), Case postale 353, 1800 Vevey,  
(CH), (applicant designated states:  
AT;BE;CH;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;NL;PT;SE)

INVENTOR:

Mollet, Beat, Ch. des Marguerites 1, 1074 Mollie-Margot, (CH)  
Germond, Jacques Edouard, Ch. des Cedres 18, 1023 Crissier, (CH)  
Lapierre, Luciane, En Quettola, 1616 Attalens, (CH)

LEGAL REPRESENTATIVE:

Becker Kurig Straus (101571), Patentanwalte Bavariastrasse 7, 80336  
Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 810289 A1 971203 (Basic)

APPLICATION (CC, No, Date): EP 96201495 960529;

PRIORITY (CC, No, Date): EP 96201495 960529

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU;  
NL; PT; SE

INTERNATIONAL PATENT CLASS: C12N-015/57; C12N-009/52; C12N-015/11;  
C12N-001/21; A23C-009/123; A23C-019/032;

ABSTRACT EP 810289 A1

The recombinant protease %Prtp% of Lactobacillus bulgaricus having the  
amino acid sequence SEQ ID NO:2, and the prepro or the anchorage portions  
of this protease. A DNA encoding the protease %prtp%, the prepro or the  
anchorage portions. The L. bulgaricus promoter of the %prtp% gene. A  
recombinant cell expressing the recombinant protease %prtp%. A method for  
producing the recombinant protease comprising, cultivating recombinant  
cells expressing the recombinant protease %prtp%, in a suitable growth  
medium under conditions that the cells express the said recombinant  
protease, and optionally isolating the said recombinant protease in the  
form of a concentrate. Use of a recombinant cell, in the manufacture of  
fermented dairy products.

ABSTRACT WORD COUNT: 110

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9711W4	396
SPEC A	(English)	9711W4	5148
Total word count - document A			5544
Total word count - document B			0
Total word count - documents A + B			5544

6/3,AB/48 (Item 3 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2003 European Patent Office. All rts. reserv.

00478741

A food-grade vector suitable for transforming a food-grade host cell, use  
of said vector for transforming food-grade host cells, and use of said  
transformed cel

Fur die Transformation von lebensmittelsicheren Wirtszellen geeigneter  
Vektor, seine Verwendung fur solche Transformationen und Verwendung der

transformierten  
Vecteur utilisable pour la transformation de cellules hotes ayant la  
qualite de produits alimentaires, utilisation de ce vecteur pour la  
transformation de ces c

PATENT ASSIGNEE:

UNILEVER N.V., (200919), Weena 455, NL-3013 AL Rotterdam, (NL),  
(applicant designated states: BE;CH;DE;DK;ES;FR;GR;IT;LI;NL;SE;AT)  
UNILEVER PLC, (200929), Unilever House Blackfriars P.O. Box 68, London  
EC4P 4BQ, (GB), (applicant designated states: GB)

INVENTOR:

Leenhouts, Cornelis Johannes Rijksuniv. Groningen, Biologisch Centr,  
Vakgroep Genetica, Kerklaan 30, NL-9571 NN Haren, (NL)  
Marugg, John David, UNILEVER Res. Lab., Olivier van Noortlaan 120,  
NL-3130 AC Vlaardingen, (NL)  
Verrips, Cornelis Theodorus, UNILEVER Res. Lab., Olivier van Noortlaan  
120, NL-3130 AC Vlaardingen, (NL)

LEGAL REPRESENTATIVE:

Sikken, Antonius H. J. M. et al (62452), UNILEVER N.V., Patent Division,  
P.O. Box 137, NL-3130 AC Vlaardingen, (NL)

PATENT (CC, No, Kind, Date): EP 487159 A1 920527 (Basic)

APPLICATION (CC, No, Date): EP 91202994 911119;

PRIORITY (CC, No, Date): EP 90203114 901123

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IT; LI; NL; SE

INTERNATIONAL PATENT CLASS: C12N-015/74; C12N-015/56; C12N-009/24;

C12N-009/40; C12N-001/21; C12N-001/21; C12R-001/225; C12R-001/46;

C12R-001/44; C12R-001/01

ABSTRACT EP 487159 A1

A food-grade vector is provided which is suitable for transforming a  
food-grade host cell and is incapable of replicating autonomously in said  
host cell, said vector comprising:

1) at least one stretch of nucleotides capable of hybridizing with  
chromosomal DNA of the non-transformed host cell enabling said vector to  
integrate stably into the chromosome of said host cell after  
transformation and

2) at least one stretch of foreign DNA selected from:

a) stretches comprising at least one DNA sequence that codes for  
at least one product enabling the transformed host cell to metabolize a  
substrate that cannot be metabolized by the non-transformed host cell,  
wherein at least said DNA sequence and the product encoded by said DNA  
sequence are foreign for a prototrophic strain of said non-transformed  
host cell

b) stretches comprising at least one DNA sequence that codes for  
at least one product enabling the transformed host cell to grow in the  
presence of a food grade, natural bacteriocidal agent, wherein at least  
said DNA sequence and the product encoded by said sequence are foreign  
for the non-transformed host cell.

The food-grade host is preferably a %lactic% acid bacterium. The  
foreign DNA preferably codes for an enzyme essential for metabolizing an  
oligosaccharide or codes for a proteinase and a maturase or codes for a  
foodgrade natural bacteriocidal agent and/or immune proteins for such an  
agent and/or proteins involved in the proper secretion of such an agent.

ABSTRACT WORD COUNT: 243

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	1425
SPEC A	(English)	EPABF1	7625
Total word count - document A			9050
Total word count - document B			0
Total word count - documents A + B			9050

6/3,AB/49 (Item 4 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

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00476876

DNA fragment from lactococcus lactis and fusion proteins thereof.  
DNA-Fragmente von Lactococcus lactis und deren Fusionsproteine.  
Fragment d'ADN de lactococcus lactis et proteines de fusion de celui-ci.  
PATENT ASSIGNEE:

NEDERLANDS INSTITUUT VOOR ZUIVELONDERZOEK, (578582), Kernhemseweg 2,  
NL-6718 ZB Ede, (NL), (applicant designated states: BE;DE;DK;FR;GB;NL)

INVENTOR:

van Asseldonk, Martinus Gerardus Josephus, Lijsterbeslaan 12, NL-3927 AE  
Renswoude, (NL)  
de Vos, Willem Meindert, Langhoven 50, NL-6721 SJ Bennekom, (NL)  
Simons, Augustinus Franciscus Maria, Durendaal 17, NL-6715 JP Ede (Gld),  
(NL)

LEGAL REPRESENTATIVE:

de Bruijn, Leendert C. et al (19641), Nederlandsch Octrooibureau  
Scheveningseweg 82 P.O. Box 29720, NL-2502 LS 's-Gravenhage, (NL)

PATENT (CC, No, Kind, Date): EP 455280 A1 911106 (Basic)

APPLICATION (CC, No, Date): EP 91200721 910327;

PRIORITY (CC, No, Date): NL 90753 900330

DESIGNATED STATES: BE; DE; DK; FR; GB; NL

INTERNATIONAL PATENT CLASS: C12N-015/31; C12N-015/62; C12N-015/52;

C12N-001/21; C12N-001/21; C12R-001/46

ABSTRACT EP 455280 A1

The invention relates to a DNA fragment comprising at least part of the sequence which is located upstream of the sequence coding for the "mature" fragment of the extracellular protein having an apparent molecular weight of 60 kDa from Lactococcus lactis strains, in particular from the Lactococcus lactis ssp Lactis strain MG 1363.

Above DNA fragment may comprise one or two signal sequences coding for very effective signal peptides as well as a promotor sequence and a ribosome binding site sequence. These components of the DNA fragment in question may be either separately or jointly combined with a gene of a homologous or heterologous protein which then can be brought to expression via a host obtaining the desired extracellular homologous or heterologous protein. (see image in original document) (see image in original document)

ABSTRACT WORD COUNT: 135

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	338
SPEC A	(English)	EPABF1	4034
Total word count - document A			4372
Total word count - document B			0
Total word count - documents A + B			4372

6/3,AB/50 (Item 5 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

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00428576

Modified proteases, process for their preparation and their use in foodstuffs.

Modifizierte Proteasen, Verfahren zu ihrer Herstellung und ihre Verwendung in Lebensmitteln.

Proteases modifiees, procede pour leur preparation et leur utilisation dans les aliments.

PATENT ASSIGNEE:

NEDERLANDS INSTITUUT VOOR ZUIVELONDERZOEK, (578581), Kernhemseweg 2 P.O.  
Box 20, NL-6710 BA Ede (Gld), (NL), (applicant designated states: GR)

INVENTOR:

Vos, Petrus Antonius Josephina, Charles Crammweg 6, NL-6871 HZ Heelsum,  
(NL)

Siezen, Roelant Jan, Eikelakkers 2, NL-6711 TE Ede, (NL)

De Vos, Willem Meindert, Langhoven 50, NL-6721 SJ Bennekom, (NL)

Kok, Jan, Soerabajastraat 57a, NL-9715 LR Groningen, (NL)

Venema, Gerhardus, Kerklaan 26, NL-9751 NN Haren, (NL)

Haandrikman, Alfred Jacques, Albrondaheerd 24, NL-9737 RB Groningen,  
(NL)

LEGAL REPRESENTATIVE:

de Bruijn, Leendert C. et al (19641), Nederlandsch Octrooibureau  
Scheveningseweg 82 P.O. Box 29720, NL-2502 LS 's-Gravenhage, (NL)

PATENT (CC, No, Kind, Date): EP 411715 A2 910206 (Basic)

EP 411715 A3 910410

APPLICATION (CC, No, Date): EP 90202113 900802;

PRIORITY (CC, No, Date): NL 892010 890804

DESIGNATED STATES: GR

INTERNATIONAL PATENT CLASS: C12N-015/57; C12N-015/62; C12N-015/74;  
C12N-001/21; C12N-009/52; A23L-001/226; C12N-001/21; C12R-001/225

ABSTRACT EP 411715 A2

The invention relates to DNA fragments containing at least one "mutant protease gene", which "mutant protease gene" is understood to mean:

- a gene made up of sections of parent protease genes of several lactococcal strains, in particular of the parent protease genes of *L. lactis* subsp. *cremoris* Wg2 and *L. lactis* subsp. *cremoris* SK11, as well as
- a parent protease gene of a lactococcal strain, in particular the parent protease gene of *L. lactis* subsp. *cremoris* Wg2 or the parent protease gene of *L. lactis* subsp. *cremoris* SK11, the DNA sequence of which has been altered in a manner such that in the mutant protease for which the gene codes:

(a) an amino acid other than that of the "wild-type" protease is present at at least one site, and/or

(b) at at least one site within the first 1350 residues of the amino acid sequence, calculated from the N-terminus, at least one amino acid of the "wild-type" protease is missing and/or one or more amino acids have been inserted, or

(c) at at least two sites separated from each other, one or more amino acids are missing and/or one or more amino acids have been inserted, the cloning vectors containing such a DNA fragment, the transformed host strains containing such a DNA fragment or vector, the mutant proteases obtainable as well as the foodstuffs and flavourings produced with the host strains or mutant proteases meant above.

ABSTRACT WORD COUNT: 242

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	1267
SPEC A	(English)	EPABF1	6992
Total word count - document A			8259
Total word count - document B			0
Total word count - documents A + B			8259

6/3,AB/51 (Item 1 from file: 371)

000989468

Title: BACTERIES LACTIQUES MUTANTES CAPABLES DE SUREXPRIMER AU MOINS UNE PEPTIDASE

Patent Applicant/Assignee: INRA

Applicant Address: INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE INRA -  
Deposant - 147 RUE DE L UNIVERSITE 75341 PARIS CEDEX 07 (FR-75341)

Inventor(s): GUEDON ERIC - 26 RUE JULES FERRY 92100 BOULOGNE (FR-92100);  
ANBA MONDOLONI JAMILA - 13 RUE CHARLES LINNE 78180 MONTIGNY LE  
BRETONNEUX (FR-78180); DELOÏME CHRISTINE - 15 RESIDENCE DES BASSES  
GARENNES 91120 PALAISEAU (FR-91120); RENAULT PIERRE - 9 RUE MAGELLAN  
78180 MONTIGNY LE BRETONNEUX (FR-78180)

Legal Representative: BREESE MAJEROWICZ SIMONNOT

Document Type: Patent / Brevet

Patent and Priority Information (Country, Number, Date):

Patent: FR 2799766 - 20010420

Application: FR 9912924 - 19991015

Priority Application: FR 9912924 - 19991015

Abstract:

La presente invention se rapporte a des mutants de bacterie lactique,

comme *L. lactis* ou *S. thermophilus* capables de surexprimer une ou plusieurs peptidases, caracterises en ce que l'un au moins des facteurs de regulation negative de l'un au moins des genes des peptidases de la dite bacterie est inactive.

Legal Status (Type, Action Date, BOPI No, Description):

Publication 20010420 0116 Date published

Search Report 20010420 0116 Date Search Report published

6/3,AB/52 (Item 1 from file: 6)

DIALOG(R)File 6:NTIS

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1506541 NTIS Accession Number: PB90-200924

Development and Use of Host-Vector Systems for the Characterization of Lactococcal Expression Signals

(Doctoral thesis)

van der Vossen, J. M. B. M.

Groningen Rijksuniversiteit (Netherlands). Dept. of Genetics.

Corp. Source Codes: 011785026

Sponsor: Unilever Research Lab., Vlaardingen (Netherlands).

9 Dec 88 109p

Languages: English Document Type: Translation; Thesis

Journal Announcement: GRAI9014

Summary in Dutch. Sponsored by Unilever Research Lab., Vlaardingen (Netherlands).

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NTIS Prices: PC A06/MF A01

Recent research on the genetics of lactococci mainly focuses on the identification and characterization of important traits for dairying, such as proteolysis, lactose fermentation, and phage insensitivity. Since *Lactococcus* streptococci are GRAS (generally regarded as safe) organisms, they may be used in an advantageous way for the production of proteins not related to dairying. The thesis describes the construction of cloning-, promoter screening- and terminator screening-vectors. In order to clone directly in *L. lactis* subsp. *lactis*, a protoplast transformation system is described in which liposomes are introduced to enhance the transformation efficiency, which enabled direct gene cloning in *L. lactis*. Since the vectors constructed can replicate in *B. subtilis* as well as in *L. lactis*, an intergeneric protoplast fusion system was developed, enabling the shuttling of the broad host range screening- and cloning-vectors from the one host to the other without the need for plasmid isolation. The putative promoters of the genes involved in proteinase synthesis (*prtP*) and maturation (*prtM*) are characterized with respect to their transcription initiation sites and their capacity to express the *cat-86* gene in strain MG1363 and *B. subtilis*.

?

Set	Items	Description
S1	1125	P RTP
S2	605	RD (unique items)
S3	573414	S2 AND BACTERIA OR BACTERIUM
S4	122	S3 AND S2
S5	52	S2 AND LACTIC
S6	52	RD (unique items)
S7	14	S6 AND MUTANT

? s s4 and mutant

122 S4

1131245 MUTANT

S8 39 S4 AND MUTANT

? t s8/3,ab/1-39

>>>No matching display code(s) found in file(s): 65, 180, 225, 342, 398, 515-516, 518, 810, 813

8/3,AB/1 (Item 1 from file: 440)

DIALOG(R)File 440:Current Contents Search(R)

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14210633 Document Delivery Available: 000176582200013 References: 30  
 TITLE: Cleavage of Treponema denticola PrcA polypeptide to yield protease complex-associated proteins PrcA1 and PrcA2 is dependent on %PrtP%  
 AUTHOR(S): Lee SY; Bian XL; Wong GWK; Hannam PM; McBride BC; Fenno JC (REPRINT)

AUTHOR(S) E-MAIL: fenno@umich.edu

CORPORATE SOURCE: Univ Michigan, Dept Biol & Mat Sci, /Ann Arbor//MI/48109 (REPRINT); Univ Michigan, Dept Biol & Mat Sci, /Ann Arbor//MI/48109; Kangnung Natl Univ, Dept Oral Microbiol, /Kangnung//South Korea/; Univ British Columbia, Dept Microbiol & Immunol, /Vancouver/BC/Canada/

PUBLICATION TYPE: JOURNAL

PUBLICATION: JOURNAL OF BACTERIOLOGY, 2002, V184, N14 (JUL), P3864-3870

GENUINE ARTICLE#: 569CH

PUBLISHER: AMER SOC MICROBIOLOGY, 1752 N ST NW, WASHINGTON, DC 20036-2904 USA

ISSN: 0021-9193

LANGUAGE: English DOCUMENT TYPE: ARTICLE

ABSTRACT: Analysis of potential virulence factors of oral spirochetes focuses on surface and secreted proteins. The Treponema denticola chymotrypsin-like protease (CTLP) is implicated in degradation of host cell molecules and contributes to tissue invasion. The CTLP complex, composed of the 72-kDa %PrtP% protein and two auxiliary proteins with molecular masses of approximately 40 and 30 kDa, is also involved in localization and oligomerization of the T. denticola major surface protein (Msp). The larger auxiliary protein was reported to be encoded by an open reading frame (ORF2) directly upstream of %prtP%. The deduced 39-kDa translation product of ORF2 contains a sequence matching the N-terminal sequence determined from one of the CTLP complex proteins. No proteins with significant homology are known, nor was information available on the third protein of the complex. DNA sequence analysis showed that ORF2 extended an additional 852 bp upstream of the reported sequence. The complete gene, designated preA, encodes a predicted N-terminally-acylated polypeptide of approximately 70 kDa. Isogenic mutants with mutations in %prtP%, prcA, and prcA-%prtP% all lacked CTLP protease activity. The prcA %mutant% lacked all three CTLP proteins. The prcA-%prtP% %mutant% produced only a C-terminally-truncated 62-kDa PrcA protein. The %prtP% %mutant% produced a full-length 70-kDa PrcA. Immunoblot analysis of recombinant PrcA constructs confirmed that PrcA is cleaved to yield the two smaller proteins of the CTLP complex, designated PrcA1 and PrcA2. These data indicate that %PrtP% is required for cleavage of PrcA and suggest that this cleavage may be required for formation or stability of outer membrane complexes.

8/3,AB/2 (Item 2 from file: 440)

DIALOG(R)File 440:Current Contents Search(R)

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12852964 References: 51



TITLE: Pleiotropic transcriptional repressor CodY senses the intracellular pool of branched-chain amino acids in *Lactococcus lactis*  
 AUTHOR(S): Guedon E; Serror P; Ehrlich SD; Renault P; Delorme C (REPRINT)  
 AUTHOR(S) E-MAIL: delorme@biotec.jouy.inra.fr  
 CORPORATE SOURCE: INRA, Lab Genet Microbienne, /F-78352 Jouy En Josas//France/ (REPRINT); INRA, Lab Genet Microbienne, /F-78352 Jouy En Josas//France/  
 PUBLICATION TYPE: JOURNAL  
 PUBLICATION: MOLECULAR MICROBIOLOGY, 2001, V40, N5 (JUN), P1227-1239  
 GENUINE ARTICLE#: 447NT  
 PUBLISHER: BLACKWELL SCIENCE LTD, P O BOX 88, OSNEY MEAD, OXFORD OX2 ONE, OXON, ENGLAND  
 ISSN: 0950-382X  
 LANGUAGE: English DOCUMENT TYPE: ARTICLE

ABSTRACT: Proteolysis is essential for supplying *Lactococcus lactis* with amino acids during growth in milk. Expression of the major components of the *L. lactis* proteolytic system, including the cell wall proteinase (%Prtp%), the oligopeptide transport system (Opp) and at least four intracellular peptidases (PepO1, PepN, PepC, PepDA2), was shown previously to be controlled negatively by a rich nitrogen source. The transcription of %prtp%, opp-pepO1, pepN and pepC genes is regulated by dipeptides in the medium. Random insertion mutants derepressed for nitrogen control in the expression of the oligopeptide transport system were isolated using an opp-lacZ fusion. A third of the mutants were targeted in the same locus. The product of the inactivated gene shared 48% identity with CodY from *Bacillus subtilis*, a pleiotropic repressor of the dipeptide permease operon (dpp) and several genes including genes involved in amino acid degradation and competence induction. The signal controlling CodY-dependent repression was searched for by analysing the response of the opp-lux fusion to the addition of 67 dipeptides with different amino acid compositions. Full correlation was found between the dipeptide content in branched-chain amino acids (BCAA; isoleucine, leucine or valine) and their ability to mediate the repression of opp-pepO1 expression. The repressive effect resulting from specific regulatory dipeptides was abolished in *L. lactis* mutants affected in terms of their transport or degradation into amino acids, showing that the signal was dependent on the BCAA pool in the cell. Lastly, the repression of opp-pepO1 expression was stronger in a %mutant% unable to degrade BCAAs, underlining the central role of BCAAs as a signal for CodY activity. This pattern of regulation suggests that, in *L. lactis* and possibly other Gram-positive %bacteria%, CodY is a pleiotropic repressor sensing nutritional supply as a function of the BCAA pool in the cell.

8/3,AB/3 (Item 3 from file: 440)  
 DIALOG(R)File 440:Current Contents Search(R)  
 (c) 2003 Inst for Sci Info. All rts. reserv.

12532714 References: 16

TITLE: Network of regulation of gene transcription of the proteolytic system of *Lactococcus lactis*  
 AUTHOR(S): Guedon E; Martin C; Gobert FX; Ehrlich SD; Renault P; Delorme C (REPRINT)  
 AUTHOR(S) E-MAIL: delorme@biotec.jouy.inra.fr  
 CORPORATE SOURCE: INRA, Lab Genet Microbienne, Domaine de Vilvert/F-78352 Jouy En Josas//France/ (REPRINT); INRA, Lab Genet Microbienne, /F-78352 Jouy En Josas//France/  
 PUBLICATION TYPE: JOURNAL  
 PUBLICATION: LAIT, 2001, V81, N1-2 (JAN-APR), P65-74  
 GENUINE ARTICLE#: 412HX  
 PUBLISHER: E D P SCIENCES, 7, AVE DU HOGGAR, PARC D ACTIVITES COURTABOEUF, BP 112, F-91944 LES ULIS CEDEXA, FRANCE  
 ISSN: 0023-7302  
 LANGUAGE: French DOCUMENT TYPE: ARTICLE

ABSTRACT: The proteolytic system of lactococci that allows degradation of caseins and proteins of milk is complex. Milk proteins contain all amino acids necessary for growth of lactic acid %bacteria%. The proteolytic system consists of an extracellularly located proteinase, transport systems

for di-tripeptides and oligopeptides and a multitude of intracellular peptidases. Expression of 13 genes was followed by transcriptional fusions in presence of different peptide sources. Transcription of 6 genes is repressed in media containing peptides and that of 4 genes (pepN, pepC, %prtP% and opp-pepO1 operon) by dipeptides containing one of the 3 branched amino acids (isoleucine, leucine and valine). Repression of gene transcription required that regulatory peptides are translocated into the cell and degraded in amino acids. Cell factors involved in this regulation were identified in derepressed mutants obtained by random mutagenesis by transposition. DtpT, a di-tripeptides transporter and CodY, homologous of the *Bacillus subtilis* pleiotropic regulator of transcription were the most frequently inactivated proteins. pepC, pepN and opp-pepO1 transcription is not repressed in codY and dtpT %mutant%. These genes of the proteolytic system belong to a same regulon since their expression is repressed by CodY regulator depending on intracellular concentration of branched amino acids or derivative products of them.

8/3,AB/4 (Item 4 from file: 440)  
DIALOG(R)File 440:Current Contents Search(R)  
(c) 2003 Inst for Sci Info. All rts. reserv.

10782026 References: 44

TITLE: Genetic characterization of a cell envelope-associated proteinase from *Lactobacillus helveticus* CNRZ32  
AUTHOR(S): Pederson JA; Mileski GJ; Weimer BC; Steele JL (REPRINT)  
AUTHOR(S) E-MAIL: jlsteele@facstaff.wisc.edu  
CORPORATE SOURCE: Univ Wisconsin, Dept Food Sci, 1605 Linden Dr/Madison//WI/53706 (REPRINT); Univ Wisconsin, Dept Food Sci, /Madison//WI/53706; Utah State Univ, Western Ctr Dairy Res, /Logan//UT/84322; Utah State Univ, Dept Nutr & Food Sci, /Logan//UT/84322  
PUBLICATION TYPE: JOURNAL  
PUBLICATION: JOURNAL OF BACTERIOLOGY, 1999, V181, N15 (AUG), P4592-4597  
GENUINE ARTICLE#: 221CH  
PUBLISHER: AMER SOC MICROBIOLOGY, 1325 MASSACHUSETTS AVENUE, NW, WASHINGTON, DC 20005-4171 USA  
ISSN: 0021-9193  
LANGUAGE: English DOCUMENT TYPE: ARTICLE

ABSTRACT: A cell envelope-associated proteinase gene (prtH) was identified in *Lactobacillus helveticus* CNRZ32. The prtH gene encodes a protein of 1,849 amino acids and with a predicted molecular mass of 204 kDa. The deduced amino acid sequence of the prtH product has significant identity (45%) to that of the lactococcal %PrtP% proteinases. Southern blot analysis indicates that prtH is not broadly distributed within *L. helveticus*. A prtH deletion %mutant% of CNRZ32 was constructed to evaluate the physiological role of PrtH. PrtH is not required for rapid growth or Fast acid production in milk by CNRZ32. Cell surface proteinase activity and specificity were determined by hydrolysis of alpha(s1)-casein fragment 1-23 by whole cells. A comparison of CNRZ32 and its prtH deletion %mutant% indicates that CNRZ32 has at least two cell surface proteinases that differ in substrate specificity.

8/3,AB/5 (Item 5 from file: 440)  
DIALOG(R)File 440:Current Contents Search(R)  
(c) 2003 Inst for Sci Info. All rts. reserv.

09997194 References: 34

TITLE: Autolysis of *Lactococcus lactis* is influenced by proteolysis  
AUTHOR(S): Buist G; Venema G; Kok J (REPRINT)  
CORPORATE SOURCE: UNIV GRONINGEN, GRONINGEN BIOMOL SCI & BIOTECHNOL INST, DEPT GENET, KERKLAAN 30/NL-9751 NN HAREN//NETHERLANDS/ (REPRINT); UNIV GRONINGEN, GRONINGEN BIOMOL SCI & BIOTECHNOL INST, DEPT GENET/NL-9751 NN HAREN//NETHERLANDS/  
PUBLICATION TYPE: JOURNAL  
PUBLICATION: JOURNAL OF BACTERIOLOGY, 1998, V180, N22 (NOV), P5947-5953  
GENUINE ARTICLE#: 137BL  
PUBLISHER: AMER SOC MICROBIOLOGY, 1325 MASSACHUSETTS AVENUE, NW,

WASHINGTON, DC 20005-4171  
ISSN: 0021-9193  
LANGUAGE: English DOCUMENT TYPE: ARTICLE

ABSTRACT: The autolysin AcmA of *Lactococcus lactis* was shown to be degraded by the extracellular Lactococcal proteinase %Prtp%. Autolysis, as evidenced by reduction in optical density of a stationary-phase culture and concomitant release of intracellular proteins, was greatly reduced when *L. lactis* MG1363 cells expressed the cell wall-anchored lactococcal proteinase %Prtp% of the PI-type caseinolytic specificity (PI). On the other hand, lactococcal strains that did not produce the proteinase showed a high level of autolysis, which was also observed when the cells produced the secreted form of PI or a cell wall-anchored proteinase with PIII-type specificity. Autolysis was also increased when MG1363 expressed the cell wall-anchored hybrid PI/PIII-type proteinase Plac. Zymographic analysis of AcmA activity during stationary phase showed that AcmA was quickly degraded by PI and much more slowly by %Prtp% proteinases with Pm-type and intermediate specificities. Autolysis of *L. lactis* by AcmA was influenced by the specificity, amount, and location of the lactococcal proteinase. No autolysis was observed when the various proteinases were expressed in an *L. lactis* acmA deletion %mutant%, indicating that %Prtp% itself did not cause lysis of cells. The chain length of a strain was significantly shortened when the strain expressed a cell wall-anchored active proteinase.

8/3,AB/6 (Item 6 from file: 440)  
DIALOG(R)File 440:Current Contents Search(R)  
(c) 2003 Inst for Sci Info. All rts. reserv.

09439589 References: 45

TITLE: A deficiency in aspartate biosynthesis in *Lactococcus lactis* subsp. *lactis* C2 causes slow milk coagulation

AUTHOR(S): Wang H; Yu WZ; Coolbear T; OSullivan D; McKay LL (REPRINT)  
CORPORATE SOURCE: UNIV MINNESOTA, DEPT FOOD SCI & NUTR, 1334 ECKLES AVE/ST PAUL//MN/55108 (REPRINT); UNIV MINNESOTA, DEPT FOOD SCI & NUTR/ST PAUL//MN/55108; NEW ZEALAND DAIRY RES INST, PALMERSTON NORTH//NEW ZEALAND/

PUBLICATION TYPE: JOURNAL

PUBLICATION: APPLIED AND ENVIRONMENTAL MICROBIOLOGY, 1998, V64, N5 (MAY), P 1673-1679

GENUINE ARTICLE#: ZL278

PUBLISHER: AMER SOC MICROBIOLOGY, 1325 MASSACHUSETTS AVENUE, NW, WASHINGTON, DC 20005-4171

ISSN: 0099-2240

LANGUAGE: English DOCUMENT TYPE: ARTICLE

ABSTRACT: A %mutant% of fast milk-coagulating (Fmc(+)) *Lactococcus lactis* subsp. *lactis* C2, designated *L. lactis* KB4, was identified. Although possessing the known components essential for utilizing casein as a nitrogen source, which include functional proteinase (%Prtp%) activity and oligopeptide, di- and tripeptide, and amino acid transport systems, KB4 exhibited a slow milk coagulation (Fmc(-)) phenotype. When the amino acid requirements of *L. lactis* C2 were compared with those of KB4 by use of a chemically defined medium, it was found that KB4 was unable to grow in the absence of aspartic acid. This aspartic acid requirement could also be met by aspartate-containing peptides. The addition of aspartic acid to milk restored the Fmc(+) phenotype of KB4. KB4 was found to be defective in pyruvate carboxylase and thus was deficient in the ability to form oxaloacetate and hence aspartic acid from pyruvate and carbon dioxide. The results suggest that when lactococci are propagated in milk, aspartate derived from casein is unable to meet fully the nutritional demands of the lactococci, and they become dependent upon aspartate biosynthesis.

8/3,AB/7 (Item 1 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
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13980306 BIOSIS NO.: 200200609127

A *Treponema denticola* CTLP protease complex-associated protein (PrCA) is processed by the protease.

AUTHOR: Fenno J C(a); Lee S Y(a); Wong G W K; Hannam P M; McBride B C

AUTHOR ADDRESS: (a)University of Michigan, Ann Arbor, MI\*\*USA

JOURNAL: Abstracts of the General Meeting of the American Society for Microbiology 102p505 2002

MEDIUM: print

CONFERENCE/MEETING: 102nd General Meeting of the American Society for Microbiology Salt Lake City, UT, USA May 19-23, 2002

SPONSOR: American Society for Microbiology

ISSN: 1060-2011

RECORD TYPE: Abstract

LANGUAGE: English

**ABSTRACT:** Analysis of potential virulence factors of oral spirochetes focuses on surface and secreted proteins. The chymotrypsin-like protease (CTLP) is implicated in *T. denticola* degradation of fibronectin and host cell protease inhibitors, and detachment of cultured cells. CTLP mediates migration of *T. denticola* through model basement membranes and increases permeability of a multilayer epithelial cell model. The present study reports on novel processing of a CTLP-associated protein. Native CTLP complex has an Mr of 95 kDa, including proteins of 72 kDa, 43 kDa and 37 kDa. Recently, a DNA fragment encoding two of the peptides was cloned and sequenced. The *prtp* gene encodes a peptide with a conserved 'subtilisin' motif. No proteins with significant homology to the deduced 43 kDa product of ORF2 are known. We previously reported construction of *T. denticola* CKE, an isogenic mutant of 35405 in which an *erm* cassette disrupts both ORF2 and *prtp*. CKE produces a small amount of monomeric Msp and barely detectable oligomeric Msp, lacks CTLP activity as determined by SAAPNA hydrolysis, and all three proteins of the CTLP complex are absent. To determine the role of the 43 kDa protein, we constructed mutants in *prtp* and in ORF2. As expected, strain PNE mutated in ORF2 has a phenotype similar to that of CKE. Interestingly, strain CCE mutated in *prtp* also lacks CTLP activity, but in this strain the '43 kDa' protein migrates at approximately 70 kDa and the '37 kDa' protein is absent. DNA sequence analysis showed the open reading frame extended upstream of the reported ORF2. The complete gene, designated *prca*, contains a signal peptide-encoding sequence and is identical to the provisional *T. denticola* genome sequence. Several portions of *prca* were cloned in an expression vector. Antibodies raised against the putative 43 kDa peptide region and the native protease complex were used to demonstrate that PrCA was processed to 43 kDa in 35405, but was not detectably processed in the *prtp* mutant. These data suggest that *Prtp* cleaves the PrCA polypeptide and that this cleavage may be required for outer membrane complex formation or stability.

2002

8/3,AB/8 (Item 2 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

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13968136 BIOSIS NO.: 200200596957

Complementation of a *Treponema denticola* flgE mutant with a novel coumermycin A1 resistant *T. denticola* shuttle vector system.

AUTHOR: Chi B(a); Kuramitsu H K(a)

AUTHOR ADDRESS: (a)State University of New York at Buffalo, Buffalo, NY\*\*  
USA

JOURNAL: Abstracts of the General Meeting of the American Society for Microbiology 102p179 2002

MEDIUM: print

CONFERENCE/MEETING: 102nd General Meeting of the American Society for Microbiology Salt Lake City, UT, USA May 19-23, 2002

SPONSOR: American Society for Microbiology

ISSN: 1060-2011

RECORD TYPE: Abstract

LANGUAGE: English

ABSTRACT: *Treponema denticola* has been shown to be associated with periodontal disease. Several potential virulence factors of *T. denticola* have been identified and mutants altered in the corresponding virulence factors were constructed and studied. However, studies using both the mutants and the complemented mutants would provide more accurate information on the role of the genes in the virulence of *T. denticola*. Previously, only an erythromycin resistance (Emr) marker could be readily used as a selective marker in *T. denticola*. Therefore, a second antibiotic marker is required for complementation of the Emr mutants. By using the mutated *gyrB* gene from a spontaneous coumermycin A1 resistant *T. denticola* mutant, an *Escherichia coli* - *T. denticola* shuttle vector that renders *T. denticola* resistant to coumermycin was constructed. The intact *T. denticola* *flgE* gene was then cloned into the shuttle vector pKMCou and the vector was transformed into the *T. denticola* ATCC 33520 *flgE* erythromycin resistant knockout mutant HL210. The resulting coumermycin resistant transformants were motile and restored FlgE expression. This complementation system should prove useful in studying the virulence factors of *T. denticola*. Based on our recent report of heterologous gene expression from the shuttle vector in *T. denticola*, this system can also be used to study the virulence factors of uncultivable spirochetes, including *T. pallidum*, the causative agent for syphilis. The function of the potential virulence factors can then be studied in a *T. denticola* background. Currently, we are using this complementation system to examine the role of *T. denticola* chemotrypsin like protease PrtP (dentilisin) in virulence.

2002

8/3,AB/9 (Item 3 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
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13511596 BIOSIS NO.: 200200140417  
Insertional inactivation of the *prtP* gene of *Treponema denticola* confirms dentilisin's disruption of epithelial junctions.  
AUTHOR: Ellen Richard P(a); Ko Kevin S-C; Lo Chun-Min; Grove David A; Ishihara Kazuyuki  
AUTHOR ADDRESS: (a)Medical Research Council Group in Periodontal Physiology, Faculty of Dentistry, Dental Research Institute, University of Toronto, 124 Edward Street, Toronto, ON, M5G 1G6\*\*Canada E-Mail: richard.ellen@utoronto.ca  
JOURNAL: Journal of Molecular Microbiology and Biotechnology 2 (4):p 581-586 October, 2000  
MEDIUM: print  
ISSN: 1464-1801  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: English

ABSTRACT: The purified chymotrypsin-like protease of *Treponema denticola*, designated dentilisin or PrtP (DDBJ accession no. D83264), can disrupt cell-cell junctions and impair the barrier function of epithelial monolayers in vitro. Serine protease inhibitors block these effects. Yet, the protease is apparently less significant in perturbing intracellular signaling pathways and cytoskeletal rearrangement in fibroblasts. The purpose of this study was to use a PrtP-deficient mutant of *T. denticola* to confirm that the cytopathic effects of whole bacteria and its outer membrane on epithelial cell junctions were primarily accounted for by the activity of this protease. The *prtP* gene of ATCC 35405 was inactivated by insertion of an erythromycin-resistance cassette, yielding mutant K1. In contrast to wildtype ATCC 35405, mutant K1 grew in tight cell aggregates; the cells had a disrupted outer sheath, as determined by electron microscopy. When compared by silver stained SDS-PAGE of sonicated extracts of whole cells, the extract of mutant K1 was missing a band at approx 90 kDa that was present in the wildtype ATCC 35405 strain. Whole cells and Triton X-100 outer membrane (OM) extracts of K1 and the wildtype strains were compared 1) for SAAPNA degrading activity by a colorimetric assay, 2) for stress fiber disruption in human

LIU Chenghua, 1125 Ranchero Way #14, San Jose, CA 95117, US  
(Residence), CN (Nationality), (Designated only for: US)  
DRMANAC Radoje T, 850 East Greenwich Place, Palo Alto, CA 94303, US, US  
(Residence), YU (Nationality), (Designated only for: US)  
Legal Representative:  
ELRIFI Ivor R (agent), Mintz, Levin, Cohn, Ferris, Glovsky, and Popeo,  
P., C., One Financial Center, Boston, MA 02111, US,  
Patent and Priority Information (Country, Number, Date):  
Patent: WO 200216439 A2 20020228 (WO 0216439)  
Application: WO 2001US4941 20010305 (PCT/WO US0104941)  
Priority Application: US 2000519705 20000307; US 2000574454 20000519  
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(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
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(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM  
Publication Language: English  
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Fulltext Word Count: 150475

English Abstract

French Abstract

8/3,AB/14 (Item 2 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00876389  
USE OF ECTOENZYMES AND SECRETED ENZYMES TO MONITOR CELLULAR PROLIFERATION  
UTILISATION D'ECTOENZYMES ET D'ENZYMES SECRETEES POUR SUIVRE LA  
PROLIFERATION CELLULAIRE  
Patent Applicant/Assignee:  
ELITRA PHARMACEUTICALS INC, Suite A, 3510 Dunhill Street, San Diego, CA  
. 92121, US, US (Residence), US (Nationality), (For all designated states  
except: US)  
Patent Applicant/Inventor:  
ZYSKIND Judith, 8514 La Jolla Scenic Drive, La Jolla, CA 92047, US, US  
(Residence), US (Nationality), (Designated only for: US)  
Legal Representative:  
HUNT Dale C (agent), 16th floor, 620 Newport Center Drive, Newport Beach,  
CA 92660, US,  
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Application: WO 2000US21049 20000802 (PCT/WO US0021049)  
Priority Application: WO 2000US21049 20000802  
Designated States: AE AG AL AM AT AT (utility model) AU AZ BA BB BG BR BY  
BZ CA CH CN CR CU CZ CZ (utility model) DE DE (utility model) DK DK  
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GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KR (utility model) KZ LC LK  
LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK  
SK (utility model) SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE  
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(EA) AM AZ BY KG KZ MD RU TJ TM  
Publication Language: English  
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English Abstract

The present invention relates to methods of measuring cellular proliferation using ectoenzymes such as membrane-bound chitobiase (N,N'-diacetylchitobiase) and nucleic acids for use in such methods.

#### French Abstract

L'invention porte sur des procedes de mesure de la proliferation cellulaire a l'aide d'ectoenzymes telles que la chitobiase (N,N'-diacetylchitobiase) liee a la membrane, et d'acides nucleiques necessaires auxdits procedes.

8/3,AB/15 (Item 3 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00864272

EXPRESSION MODULATING SEQUENCES  
SEQUENCES MODULANT L'EXPRESSION

Patent Applicant/Assignee:

THE UNIVERSITY OF QUEENSLAND, St Lucia, Queensland 4072, AU, AU  
(Residence), AU (Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

ROTHNAGEL Joseph Attila, 39 Gilruth Street, Kenmore, Queensland 4069, AU,  
AU (Residence), AU (Nationality), (Designated only for: US)

WANG Xue-Qing, 7/15 Bellevue Terrace, St Lucia, Queensland 4067, AU, AU  
(Residence), AU (Nationality), (Designated only for: US)

Legal Representative:

HUGHES E John L (et al) (agent), DAVIES COLLISON CAVE, Level 3, 303  
Coronation Drive, Milton, Queensland 4064, AU,

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CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP

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SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

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#### English Abstract

The present invention relates generally to a method for modulating expression of a genetic sequence and to agents useful for same. More particularly, the present invention provides a means for modulating expression of a genetic sequence by introducing, creating or deleting one or more pseudo-translation initiation sites in the nucleotide sequence of an mRNA, upstream, i.e. 5', of the authentic translation initiation site of an open reading frame. The present invention provides further modulation of expression by introducing, creating or removing Kozac or Kozac-like sequences genetically proximal to the pseudo-translation initiation site(s). Modulation of expression is further manipulated by the introduction, creation or removal of a termination signal prior to the authentic translation initiation site or after this site but in a different reading frame relative to the reading frame determined by the authentic translation initiation site. The present invention further provides genetic agents including a plurality of nucleic acid molecules each with a predetermined number of pseudo-translation initiation sites and/or pseudo-open reading frames (ORFs) wherein each sequence influences or otherwise contributes to a particular level of expression for genetic sequences operably linked or associated to the 3' end of said nucleic acid molecules. The level of expression of the genetic sequences is commensurate with a selected nucleic acid molecule which becomes a 5' untranslated or leader region (5'UTR) of said genetic sequence. The present invention still further contemplates a method for detecting a

disease condition such as cancer or a proliferative disorder wherein the disease condition is associated with a particular level of expression of a gene or other genetic sequence. Such a method is predicated in part on identifying a particular 5'UTR or 5'UTR-encoding sequence or the level of pseudo-translation initiation sits therein alone or in combination with pseudo-ORFs which provides an indication as to the likely level of expression of said gene or genetic sequences. The ability to modulate the level of expression of a genetic sequence is useful, inter alia, for gene therapy applications and for expressing traits at selective levels in plants. Such traits include herbicide and pesticide resistance.

French Abstract

La presente invention concerne un procede de modulation de l'expression d'une sequence de genes ainsi que des agents utilises a cet effet. De maniere plus specifique, cette invention se rapporte a un moyen permettant de moduler l'expression d'une sequence de genes qui permet d'introduire, de creer ou de supprimer au moins un site d'initiation de pseudo-traduction dans la sequence nucleotidique d'un ARNm, en amont, par exemple, du site d'initiation 5' de traduction authentique d'un cadre de lecture ouvert. La presente invention permet egalement de moduler l'expression au moyen de l'introduction, de la creation ou de la suppression de sequences Kozac ou de type Kozac genetiquement proches du ou des sites d'initiation de pseudo-traduction. La modulation de l'expression est egalement effectuee au moyen de l'introduction, de la creation ou de la suppression d'un signal de terminaison avant le site d'initiation de traduction authentique ou apres ce meme site mais dans un cadre de lecture different du cadre de lecture determine par le site d'initiation de traduction authentique. La presente invention concerne des agents genetiques comprenant une pluralite de molecules d'acide nucleique comprenant individuellement un nombre predetermine de sites d'initiation de pseudo-traduction et/ou de cadres de lecture pseudo-ouverts (ORF), de sorte que chaque sequence exerce une influence ou contribue de quelque maniere que ce soit a un niveau d'expression particulier pour les sequences de genes fonctionnellement liees ou associees a l'extremite 3' desdites molecules d'acide nucleique. Le niveau d'expression des sequences de genes est en rapport avec une molecule d'acide nucleique selectionnee qui devient une region 5' non traduite ou de tete (5'UTR) de ladite sequence de genes. La presente invention se rapporte egalement a un procede de detection d'un etat pathologique tel qu'un cancer ou une maladie a evolution chronique qui est associe a un niveau d'expression particulier d'un gene ou d'une sequence de genes. Un tel procede est fonde en partie sur l'identification d'une region 5'UTR ou d'une sequence codant 5'UTR particuliere ou du niveau de sites d'initiation de pseudo-traduction seuls ou en combinaison avec des pseudo-ORF, ceci donnant une indication concernant le niveau d'expression probable dudit gene ou de ladite sequence de genes. La possibilite de moduler le niveau d'expression d'une sequence de genes est utile, entre autres, pour des applications de therapie genique et pour exprimer des caracteristiques a des niveaux selectifs dans des plantes. Ces caracteristiques comprennent la resistance aux herbicides et aux pesticides.

8/3,AB/16 (Item 4 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT  
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00836656

METHOD OF TREATING PHENYLKETONURIA AND MEANS THEREFOR  
METHODE ET MOYENS DE TRAITEMENT DE LA PHENYLKETONURIE  
Patent Applicant/Assignee:

NILAB APS, Toftegardsvej 16, DK-5500 Middelfart, DK, DK (Residence), DK  
(Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

JOHNSEN Mads, Sveasvej 5, 3. th, DK-1917 Frederiksberg C, DK, DK  
(Residence), DK (Nationality), (Designated only for: US)

RAVN Peter, Erikaparken 59, 1.th., DK-2820 Gentofte, DK, DK (Residence),  
DK (Nationality), (Designated only for: US)

MADSEN Soren Michael, Baldersgade 11, 1. th., DK-2200 Copenhagen N, DK,  
DK (Residence), DK (Nationality), (Designated only for: US)



VRANG Astrid, Langs Hegnet 76, DK-2800 Lyngby, DK, DK (Residence), DK (Nationality), (Designated only for: US)

ISRAELSEN Hans, Provstensvej 1A, DK-3450 Allerød, DK, DK (Residence), DK (Nationality), (Designated only for: US)

BREDMOSE Lars, Brynhildegade 9, 3. tv., DK-2200 Copenhagen N, DK, DK (Residence), DK (Nationality), (Designated only for: US)

ARNAU Jose, Melvillevej 9, DK-2900 Hellerup, DK, DK (Residence), ES (Nationality), (Designated only for: US)

JENSEN Stein Højmark, Toftegårdsvej 16, DK-5500 Middelfart, DK, DK (Residence), DK (Nationality), (Designated only for: US)

GJØTTING Torben, Vibevej 7, DK-4040 Jyllinge, DK, DK (Residence), DK (Nationality), (Designated only for: US)

NIELSEN Egon, Niels W. Gades Gade 33, DK-2100 Copenhagen O, DK, DK (Residence), DK (Nationality), (Designated only for: US)

Legal Representative:  
 PLOUGMANN & VINGTOFT A S (agent), Sankt Annae Plads 11, P.O. Box 3007, DK-1021 Copenhagen K, DK,

Patent and Priority Information (Country, Number, Date):  
 Patent: WO 200168822 A2-A3 20010920 (WO 0168822)  
 Application: WO 2001DK172 20010314 (PCT/WO DK0100172)  
 Priority Application: US 2000525116 20000314

Designated States: AE AG AL AM AT AT (utility model) AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ CZ (utility model) DE DE (utility model) DK DK (utility model) DM DZ EE EE (utility model) ES FI FI (utility model) GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SK (utility model) SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW  
 (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
 (OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG  
 (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
 (EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English  
 Filing Language: English  
 Fulltext Word Count: 19770

#### English Abstract

Novel cells expressing phenylalanine hydroxylase activity and novel fusion proteins comprising, in addition to the phenylalanine hydroxylase activity, a polypeptide enhancing and/or stabilising the phenylalanine hydroxylase activity are provided. The cells are useful for treatment of phenylketonuria (PKU) that is caused by genetically conditioned metabolic disorders in humans and animals resulting in an accumulation in the body of phenylalanine. The cells and/or proteins may be administered directly to the PKU patients to effect conversion of phenylalanine in the body, or added to proteinaceous food products in order to reduce the content of phenylalanine.

#### French Abstract

L'invention concerne des cellules exprimant une activité de la phenylalanine-hydroxylase et des proteines hybrides comprenant, en plus de l'activité de phenylalanine-hydroxylase, un polypeptide renforçant et/ou stabilisant cette dernière. Lesdites cellules s'avèrent utiles dans le traitement de la phenylcetonurie, causée par des troubles du métabolisme conditionnés génétiquement chez les humains et les animaux, et résultant d'une accumulation de phenylalanine dans le corps. Ces cellules et/ou proteines peuvent être administrées directement aux patients atteints de phenylcetonurie pour provoquer la conversion de la phenylalanine dans le corps, ou elles peuvent être additionnées à des produits alimentaires protéiniques pour réduire le taux de phenylalanine.

8/3,AB/17 (Item 5 from file: 349)  
 DIALOG(R)File 349:PCT FULLTEXT  
 (c) 2003 WIPO/Univentio. All rts. reserv.

00796874  
 \*MUTANT\* LACTIC \*BACTERIA\* WITH A CAPACITY FOR OVEREXPRESSING AT LEAST ONE PEPTIDASE  
 BACTERIES LACTIQUES MUTANTES CAPABLES DE SUREXPRESSER AU MOINS UNE PEPTIDASE

Patent Applicant/Assignee:

INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE -INRA-, 147, rue de  
l'Universite, F-75338 Paris Cedex 07, FR, FR (Residence), FR  
(Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

GUEDON Eric, 26, rue Jules Ferry, F-92100 Boulogne, FR, FR (Residence),  
FR (Nationality), (Designated only for: US)

ANBA-MONDOLONI Jamila, 13, rue Charles Linne, F-78180  
Montigny-le-Bretonneux, FR, FR (Residence), FR (Nationality),  
(Designated only for: US)

DELORME Christine, 15, residence des Basses Garennes, F-91120 Palaiseau,  
FR, FR (Residence), FR (Nationality), (Designated only for: US)

RENAULT Pierre, 9, rue Magellan, F-78180 Montigny-le-Bretonneux, FR, FR  
(Residence), FR (Nationality), (Designated only for: US)

Legal Representative:

BREESE-MAJEROWICZ (agent), 3, avenue de l'Opera, F-75001 Paris, FR,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200129183 A2-A3 20010426 (WO 0129183)

Application: WO 2000FR2869 20001013 (PCT/WO FR0002869)

Priority Application: FR 9912924 19991015

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DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ

LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG

SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ~~ES FI FR GB~~ GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: French

Filing Language: French

Fulltext Word Count: 7040

English Abstract

The invention relates to mutants of lactic %bacteria% such as L. lactis  
or S. thermophilus which can overexpress one or more peptidases,  
characterised in that at least one of the negative regulation factors of  
at least one of the peptidase genes of said %bacteria% is inactivated,  
said negative regulation factor being selected from a group comprising  
the gene codY, the genes of the operon lev, and a gene coding for a  
protein that is homologous with a beta-glucosidase.

French Abstract

La presente invention se rapporte a des mutants de bacteries lactiques,  
comme L. lactis ou S. thermophilus capables de surexprimer une ou  
plusieurs peptidases, caracterises en ce que l'un au moins des facteurs  
de regulation negative de l'un au moins des genes des peptidases desdites  
bacteries est inactive, ledit facteur de regulation negative etant choisi  
dans le groupe comprenant le gene codY, les genes de l'operon lev, un  
gene codant une proteine homologue a une beta-glucosidase.

8/3,AB/18 (Item 6 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00777600

METHOD OF ISOLATING SECRETION SIGNALS IN LACTIC ACID %BACTERIA% AND NOVEL  
SECRETION SIGNALS ISOLATED FROM LACTOCOCCUS LACTIS

PROCEDE D'ISOLEMENT DE SIGNAUX DE SECRETION DANS DES BACTERIES D'ACIDE  
LACTIQUE ET NOUVEAUX SIGNAUX DE SECRETION ISOLEES ISSUS DE LACTOCOCCUS  
LACTIS

Patent Applicant/Assignee:

BIOTEKNOLOGISK INSTITUT, Kogle Alle 2, DK-2970 Hoersholm, DK, DK  
(Residence), DK (Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

RAVN Peter, Hegnsvej 123, DK-2850 Naerum, DK, DK (Residence), DK  
(Nationality), (Designated only for: US)

MADSEN Soeren Michael, 1st floor, Baldersgade 11, DK-2200 Copenhagen N,  
DK, DK (Residence), DK (Nationality), (Designated only for: US)

VRANG Astrid, Langs Hegnet 76, DK-2800 Lyngby, DK, DK (Residence), DK (Nationality), (Designated only for: US)  
ISRAELSEN Hans, Proevestensvej 1A, DK-3450 Allerød, DK, DK (Residence), DK (Nationality), (Designated only for: US)  
JOHNSSEN Mads Groenvold, Sveasvej 5, 3rd floor, DK-1917 Frederiksberg C, DK, DK (Residence), DK (Nationality), (Designated only for: US)  
BREDMOSE Lars, Brynhildegade 9, 3rd floor, DK-2200 Copenhagen N, DK, DK (Residence), DK (Nationality), (Designated only for: US)  
ARNAU Jose, Melvillevej 9, DK-2900 Hellerup, DK, DK (Residence), ES (Nationality), (Designated only for: US)

Legal Representative:

PLOUGMANN VINGTOFT & PARTNERS A S (agent), Sankt Annae Plads 11, P.O. Box 3007, DK-1021 Copenhagen K, DK,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200111060 A2-A3 20010215 (WO 0111060)

Application: WO 2000DK437 20000804 (PCT/WO DK0000437)

Priority Application: DK 991105 19990806

Designated States: AE AG AL AM AT AT (utility model) AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ CZ (utility model) DE DE (utility model) DK DK (utility model) DM DZ EE EE (utility model) ES FI FI (utility model) GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KR (utility model) KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SK (utility model) SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE  
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 14970

English Abstract

A method of identifying nucleotide sequences coding for signal peptides in lactic acid %bacteria%, using a DNA molecule comprising a transposon including a promoterless reporter gene from which DNA molecule a region between the LR and the reporter gene is deleted and the DNA molecule comprises a DNA sequence coding for a secretion reporter molecule. By deleting the region between the LR and the reporter gene, stop codons in-frame with the secretion reporter molecule is removed which upon transposition permits translational fusions from upstream the LR.

French Abstract

L'invention concerne un procede d'identification de sequences nucleotidiques codant pour des peptides signaux dans des bacteries d'acide lactique, qui utilise une molecule d'ADN contenant un transposon qui inclut un gene rapporteur sans promoteur ; une region de cette molecule d'ADN, situee entre l'extremite terminale gauche et le gene rapporteur, est deletee et la molecule d'ADN comporte une sequence d'ADN codant pour une molecule rapporteur de secretion. La deletion de la region situee entre l'extremite terminale gauche et le gene rapporteur permet d'eliminer les codons de terminaison situes dans le meme cadre de lecture que la molecule rapporteur de secretion, ce qui, au cours d'une transposition, permet des fusions traductionnelles a partir d'une region situee en aval de l'extremite terminale gauche.

8/3,AB/19 (Item 7 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00575936

GRAM-POSITIVE %BACTERIA% DEPRIVED OF HtrA PROTEASIC ACTIVITY AND THEIR USES  
BACTERIES A GRAM POSITIF DEPOURVUES D'ACTIVITE PROTEASIQUE HtrA, ET LEURS  
UTILISATIONS

Patent Applicant/Assignee:

INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE,  
POQUET Isabelle,  
GRUSS Alexandra,  
BOLOTINE Alexandre,

SOROKINE Alexei,  
Inventor(s):  
POQUET Isabelle,  
GRUSS Alexandra,  
BOLOTINE Alexandre,  
SOROKINE Alexei,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200039309 A1 20000706 (WO 0039309)  
Application: WO 99FR3270 19991223 (PCT/WO FR9903270)  
Priority Application: FR 9816462 19981224

Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK

DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ  
TM TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ TZ UG ZW AM  
AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL  
PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

Publication Language: French

Fulltext Word Count: 9474

#### English Abstract

The invention concerns %bacteria% strains, obtained from gram-positive %bacteria% whereof the genome size is not more than 3.2 Mb, and wherein the HtrA surface protease is inactive. Said strains are useful for expressing exported proteins of interest.

#### French Abstract

L'invention concerne des souches bacteriennes, obtenues a partir de bacteries a gram-positif dont la taille du genome est au plus egale a 3,2 Mb, et dans lesquelles la protease de surface HtrA est inactive. Ces souches sont utilisables pour l'expression de proteines d'interet exportees.

8/3,AB/20 (Item 8 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00545783

NON-VIRULENT i(PORPHYROMONAS GINGIVALIS) %MUTANT%  
%MUTANT% NON-VIRULENT DU i(PORPHYROMONAS GINGIVALIS)

Patent Applicant/Assignee:

LOMA LINDA UNIVERSITY,  
FLETCHER Hansel M,

Inventor(s):

FLETCHER Hansel M,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200009156 A1 20000224 (WO 0009156)  
Application: WO 99US18197 19990811 (PCT/WO US9918197)  
Priority Application: US 98133089 19980812

Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK

DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM  
TR TT UA UG US UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ UG ZW AM AZ BY KG  
KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF  
BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 8051

#### English Abstract

A non-virulent, i(recA) defective %mutant% of i(Porphyromonas gingivalis). The i(Porphyromonas gingivalis) strain which is deposited at ATCC under accession number 202109. Also a method of decreasing the growth rate or reproduction rate of i(Porphyromonas gingivalis) in a mammal comprising the step of administering to the mammal at least one dose of i(Porphyromonas gingivalis) according to the present invention. Further, a method of preventing or treating a i(Porphyromonas gingivalis) infection such as periodontitis in a mammal comprising the step of administering to the mammal at least one dose of i(Porphyromonas gingivalis) according to the present invention. Also, a pharmaceutical composition comprising a non-virulent, i(recA) defective %mutant% of

*App't conts*

i(Porphyromonas gingivalis).

French Abstract

L'invention porte sur un %mutant% defectif non-virulent, le i(recA), du i(Porphyromonas gingivalis) dont la souche est deposee a l'ATCC sous le numero d'enregistrement 202109, et sur un procede de reduction du taux de croissance ou de reproduction du i(Porphyromonas gingivalis) chez les mammiferes, consistant a leur administrer au moins une dose du i(Porphyromonas gingivalis) de l'invention. L'invention porte egalement sur un procede de prevention ou traitement d'une infection par le i(Porphyromonas gingivalis) telle qu'une periodontite affectant un mammifere, par administration d'au moins une dose du i(Porphyromonas gingivalis) de l'invention. L'invention porte egalement sur une preparation pharmaceutique comportant le %mutant% defectif non-virulent, i(recA), du i(Porphyromonas gingivalis).

8/3,AB/21 (Item 9 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00521574

REGULATED TARGET EXPRESSION FOR SCREENING  
EXPRESSION REGULEE DE CIBLES A DES FINS DE CRIBLAGE

Patent Applicant/Assignee:

VERSICOR INC,  
TRIAS Joaquim,  
YOUNG Dennis,  
ROSENOW Carsten,

Inventor(s):

TRIAS Joaquim,  
YOUNG Dennis,  
ROSENOW Carsten,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9952926 A1 19991021

Application: WO 99US8164 19990414 (PCT/WO US9908164)

Priority Application: US 9898563 19980414; US 9882952 19980424; US  
98100430 19980710; US 98105441 19981023; US 98105447 19981023; US  
99117758 19990129; US 99117955 19990129

Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES  
FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU  
LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA  
UG US UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ UG ZW AM AZ BY KG KZ MD RU  
TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG  
CI CM GA GN GW ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 23430

English Abstract

Methods and compositions for screening compounds for potential therapeutic activity and for identifying drug targets are provided. The methods rely on controlled expression (either underexpression or overexpression) of an essential cellular gene, which can be achieved, in one embodiment, by fusion of a heterologous regulatory element to the gene. The method is capable of identifying a drug target in the absence of any knowledge of target function.

French Abstract

L'invention porte sur des methodes et compositions servant au criblage de composees pour ce qui est de leur activite therapeutique potentielle et a l'identification de cibles de medicaments. Lesdites methodes, qui reposent sur l'expression regulee (sous ou sur expression) d'un gene essentiel de culture, laquelle dans l'une des variantes s'obtient par la fusion avec le gene d'un element regulateur heterologue, permettent d'identifier des cibles de medicaments meme sans en connaitre aucune des fonctions.

8/3,AB/22 (Item 10 from file: 349)

00502630

HUMAN GENES AND GENE EXPRESSION PRODUCTS I  
GENES HUMAINS ET PRODUITS D'EXPRESSION GENIQUE I

Patent Applicant/Assignee:

CHIRON CORPORATION,  
HYSEQ INC,

Inventor(s):

WILLIAMS Lewis T,  
ESCOBEDO Jaime,  
INNIS Michael A,  
GARCIA Pablo Dominguez,  
SUDDUTH-KLINGER Julie,  
REINHARD Christoph,  
GIESE Klaus,  
RANDAZZO Filippo,  
KENNEDY Giulia C,  
POT David,  
KASSAM Altaf,  
LAMSON George,  
DRMANAC Radoje,  
CRKVENJAKOV Radomir,  
DICKSON Mark,  
DRMANAC Snezana,  
LABAT Ivan,  
LESHKOWITZ Dena,  
KITA David,  
GARCIA Veronica,  
JONES Lee William,  
STACHE-CRAIN Birgit,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9933982 A2 19990708  
Application: WO 98US27610 19981222 (PCT/WO US9827610)  
Priority Application: US 9768755 19971223; US 9880664 19980403; US  
98105234 19981021; US 98105877 19981027; US 98217471 19981221

Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES  
FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU  
LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA  
UG UZ VN YU ZW GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT  
BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA  
GN GW ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 71178

English Abstract

This invention relates to novel human polynucleotides and variants thereof, their encoded polypeptides and variants thereof, to genes corresponding to these polynucleotides and to proteins expressed by the genes. The invention also relates to diagnostic and therapeutic agents employing such novel human polynucleotides, their corresponding genes or gene products, e.g., these genes and proteins, including probes, antisense constructs, and antibodies.

French Abstract

Cette invention porte sur de nouveaux polynucleotides humains et des variantes de ceux-ci, sur leurs polypeptides codes et les variantes de ceux-ci, sur des genes correspondant a ces polynucleotides et sur des proteines exprimees par ces genes. L'invention porte egalement sur des agents diagnostiques et therapeutiques utilisant ces nouveaux polynucleotides humains, sur leurs genes ou produits geniques correspondants tels que ces genes et proteines, y compris des sondes, des produits de recombinaison antisens et des anticorps.

8/3,AB/23 (Item 11 from file: 349)

00494484  
ATTACHING SUBSTANCES TO MICRO-ORGANISMS  
FIXATION DE SUBSTANCES A DES MICRO-ORGANISMES  
Patent Applicant/Assignee:  
RIJKSUNIVERSITEIT GRONINGEN,  
BUIST Girbe,  
LEENHOUTS Cornelis Johannes,  
VENEMA Gerard,  
KOK Jan,  
Inventor(s):  
BUIST Girbe,  
LEENHOUTS Cornelis Johannes,  
VENEMA Gerard,  
KOK Jan,  
Patent and Priority Information (Country, Number, Date):  
Patent: WO 9925836 A1 19990527  
Application: WO 98NL655 19981112 (PCT/WO NL9800655)  
Priority Application: EP 97203539 19971113  
Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES  
FI GB GD GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV  
MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG  
US UZ VN YU ZW GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT  
BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA  
GN GW ML MR NE SN TD TG  
Publication Language: English  
Fulltext Word Count: 15301

English Abstract  
The invention relates to surface display of proteins on micro-organisms via the targeting and anchoring of heterologous proteins to the outer surface of cells such as yeast, fungi, mammalian and plant cells, and %bacteria%. The invention provides a proteinaceous substance comprising a reactive group and at least one attaching peptide which comprises a stretch of amino acids having a sequence corresponding to at least a part of the consensus amino acid sequence listed in figure 10 and comprises a method for attaching a proteinaceous substance to the cell wall of a micro-organism comprising the use of said attaching peptide.

French Abstract  
Cette invention a trait a une technique permettant de faire apparaitre des proteines a la surface de micro-organismes par ciblage de proteines heterologues et ancrage de celles-ci a la surface exterieure de cellules, notamment des levures, des cellules de champignons, de vegetaux et de mammiferes, ainsi qu'a la surface exterieure de bacteries. Elle concerne egalement une substance proteinique possedant un groupe reactif et au moins un peptide de fixation qui comporte une extension d'acides amines possedant une sequence correspondant a au moins une partie de la sequence consensus aminoacide representee dans la figure 10. L'invention porte, de surcroit, sur une technique permettant de fixer une substance proteinique a la paroi cellulaire d'un micro-organisme en faisant intervenir ledit peptide de fixation.

8/3,AB/24 (Item 12 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00397844  
METHODS FOR PRODUCING DAIRY PRODUCTS, IN PARTICULAR CHEESE USING LACTIC ACID %BACTERIA% PROVIDED WITH ADDITIONAL NEUTRAL PROTEASE ACTIVITY  
PROCEDE DE PRODUCTION DE PRODUITS LAITIERS, NOTAMMENT DE FROMAGE, A PARTIR DE BACTERIES D'ACIDE LACTIQUE POSSEDANT UNE ACTIVITE COMPLEMENTAIRE DE PROTEASE NEUTRE  
Patent Applicant/Assignee:  
FRIESLAND BRANDS B V,  
MIERAU Igor,  
VAN DEN BURG Lambertus,  
KOK Jan,  
VENEMA Gerhardus,

Inventor(s):

MIERAU Igor,  
VAN DEN BURG Lambertus,  
KOK Jan,  
VENEMA Gerhardus,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9738587 A1 19971023  
Application: WO 97NL192 19970415 (PCT/WO NL9700192)  
Priority Application: NL 96200948 19960415

Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES  
FI GB GE GH HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN  
MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG US UZ VN YU GH  
KE LS MW SD SZ UG AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB  
GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 9896

English Abstract

The present invention relates to a method for carrying out a process of biotransformation of a substrate whereby at least one lactic acid ~~bacterium~~ comprising a gene encoding a neutral protease having an altered resulting activity, e.g. a neutral protease having an altered stability and/or specificity, is used. Further, a food product, e.g. a cheese, obtainable by the said method is disclosed.

*not  
inernal*

French Abstract

Cette invention concerne un procede permettant de realiser un processus de transformation biologique d'un substrat. Ce procede fait appel a une ou plusieurs bacteries d'acide lactique, lesquelles comprennent un gene qui code une protease neutre possedant une activite finale modifiee comme, par exemple, une protease neutre possedant une stabilite et/ou une specificite modifiee. Cette invention concerne egalement un produit alimentaire, tel que du fromage, obtenu d'apres ce procede.

8/3,AB/25 (Item 13 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT  
(c) 2003 WIPO/Univentio. All rts. reserv.

00352432

PROTEASE VARIANTS AND COMPOSITIONS  
VARIANTES DU TYPE PROTEASE ET COMPOSITIONS  
Patent Applicant/Assignee:

NOVO NORDISK A S,

Inventor(s):

SIERKSTRA L N,  
KLUGKIST J,  
MARKVARDSEN Peter,  
VON DER OSTEN Claus,  
BAUDITZ Peter,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9634946 A1 19961107  
Application: WO 96DK207 19960502 (PCT/WO DK9600207)  
Priority Application: DK 51995 19950505; DK 42196 19960412

Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CZ DE DK EE ES FI GB  
GE HU IS JP KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL  
PT RO RU SD SE SG SI SK TJ TM TR TT UA UG UZ VN KE LS MW SD SZ UG AM AZ  
BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE  
BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 18668

English Abstract

A subtilisin having improved storage stability or improved performance in detergents, wherein one or more amino acid residues situated in, or in the vicinity of a hydrophobic domain of the parent subtilase have been substituted for an amino acid residue more hydrophobic than the original residue, said hydrophobic domain comprising the residues corresponding to residues P129, P131, I165, Y167, Y171 or BLS309 (in BASBPN numbering),



and said residues in the vicinity thereof comprises residues corresponding to the residues E136, G159, S164, R170, A194, and G195 of BLS309 (in BASBPN numbering), with the exception of the R170M, R170I and R170Y variant of BLS309.

#### French Abstract

L'invention se rapporte a une subtilisine dont on ameliore la stabilite au stockage et le rendement dans les detergents. Un ou plusieurs residus d'acides amines de ladite substance, situes a l'interieur ou au voisinage d'un domaine hydrophobe de la subtilase parentale, ont ete remplaces par un residu d'acide amine plus hydrophobe que le residu initial. Le domaine hydrophobe considere renferme les residus correspondants aux residus P129, P131, I165, Y167, Y171 de BLS309 ( en numerotation BASBPN), et les residus situes au voisinage du domaine en question comprennent ceux qui correspondent aux residus E136, G159, S164, R170, A194 et G195 de BLS309 (en numerotation BASBPN), a l'exception des variantes R170M, R170I et R170Y de BLS309.

8/3,AB/26 (Item 14 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT  
(c) 2003 WIPO/Univentio. All rts. reserv.

00352421

#### SUBTILISIN VARIANTS

#### VARIANTES DE SUBTILISINE

Patent Applicant/Assignee:

UNILEVER N V,  
UNILEVER PLC,

Inventor(s):

KLUGKIST Jan,  
MARKVARDSEN Peter,  
VON DER OSTEN Claus,  
SIERKSTRA Laurens Nicolaas,  
BAUDITZ Peter,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9634935 A2 19961107  
Application: WO 96EP1610 19960412 (PCT/WO EP9601610)  
Priority Application: NL 95201161 19950505

Designated States: AL AM AT AU AZ BB BG BR BY CA CH CN CZ DE DK EE ES FI GB  
GE HU IS JP KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL  
PT RO RU SD SE SG SI SK TJ TM TR TT UA UG UZ VN KE LS MW SD SZ UG AM AZ  
BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE  
BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 17226

#### English Abstract

Detergent compositions are provided comprising variants of subtilase, which have been produced by mutating the genes for a number of subtilases and expressing the mutated genes in suitable hosts. The enzymes exhibit improved stability and/or wash performance in detergents, especially liquid detergents and soap bars, in comparison to their wild type parent enzymes. The enzymes are well-suited for use in liquid detergent compositions and soap bars.

#### French Abstract

Compositions detergentes qui comprennent des variantes de subtilase, produites par mutation de genes d'un certain nombre de subtilases et par expression des genes mutes chez des hotes adaptes. Lesdites enzymes presentent une stabilite et/ou une performance de lavage ameliorees dans des detergents, en particulier des detergents liquides et des pains de savon, par rapport aux enzymes meres de type sauvage. Lesdites enzymes sont appropriees pour etre utilisees dans des detergents liquides et des pains de savon.

8/3,AB/27 (Item 15 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT

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00335424

CLONED PORPHYROMONAS GINGIVALIS GENES AND PROBES FOR THE DETECTION OF  
PERIODONTAL DISEASE  
GENES CLONES DE PORPHYROMONAS GINGIVALIS ET SONDES DE DETECTION DE  
PARADONTOPATHIE

Patent Applicant/Assignee:

UNIVERSITY OF FLORIDA,  
UAB RESEARCH FOUNDATION,

Inventor(s):

PROGULSKE-FOX Ann,  
TUMWASORN Somying,  
LEPINE Guylaine,  
HAN Naiming,  
LANTZ Marilyn,  
PATTI Joseph M,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9617936 A2 19960613

Application: WO 95US16108 19951211 (PCT/WO US9516108)

Priority Application: US 94353485 19941209

Designated States: AL AM AU BB BG BR BY CA CN CZ EE FI GE HU IS JP KG KP KR

KZ LK LR LT LV MD MG MK MN MX NO NZ PL RO RU SG SI SK TJ TM TT UA UZ VN

KE LS MW SD SZ UG AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE BF BJ

CF CG CI CM GA GN ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 66422

#### English Abstract

DNA fragments from Porphyromonas gingivalis which express hemagglutinin/proteases that elicit anti-P. gingivalis immunologic responses are described. Microorganisms, genetically modified to express P. gingivalis antigens, are provided. Also disclosed are probes, vaccines, and monoclonal antibodies for the detection and prevention of periodontal disease.

#### French Abstract

La presente invention concerne des fragments d'ADN de Porphyromonas gingivalis qui expriment des hemagglutinine/proteases qui provoquent des reponses immunologiques anti P. gingivalis. Elle concerne egalement des microorganismes modifies genetiquement afin d'exprimer des antigenes P. gingivalis. Enfin, cette invention concerne des sondes, des vaccins et des anticorps monoclonaux destines a la detection et a la prevention de paradontopathie.

8/3,AB/28 (Item 16 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

(c) 2003 WIPO/Univentio. All rts. reserv.

00313408

PROCESS FOR THE LYSIS OF A CULTURE OF LACTIC ACID %BACTERIA% BY MEANS OF A  
LYSIN, AND USES OF THE RESULTING LYSED CULTURE

PROCEDE DE LYSE D'UNE CULTURE DE BACTERIES LACTIQUES A L'AIDE D'UNE LYSINE,  
ET APPLICATIONS DE LA CULTURE LYSEE AINSI OBTENUE

Patent Applicant/Assignee:

QUEST INTERNATIONAL B V,  
BUIST Girbe,  
VENEMA Gerard,  
KOK Jan,  
LEDEBOER Aat M,

Inventor(s):

BUIST Girbe,  
VENEMA Gerard,  
KOK Jan,  
LEDEBOER Aat M,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9531561 A1 19951123

Application: WO 95NL170 19950512 (PCT/WO NL9500170)

Priority Application: AT 394201353 19940512  
Designated States: AU JP US AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE  
Publication Language: English  
Fulltext Word Count: 23360

#### English Abstract

The invention provides a process for the lysis of a culture of lactic acid %bacteria%, or a product containing such culture e.g. cheese, by means of a lysin through the in situ production of a homologous autolysin, or a heterologous autolysin obtainable from Gram-positive %bacteria% esp. from lactic acid %bacteria%. The gene encoding said autolysin is controlled by a promoter, preferably regulated by food-grade ingredients or parameters, to achieve an enhanced lysis after induction resulting in an enhanced production of total autolysin compared with the natural production level of the homologous autolysin during fermentation or shortly thereafter. Other uses of the invention include preparing a mixture of peptides which are modified by peptidases freed after the lysis, using the autolysin as a bactericidal agent against spoiling %bacteria% or pathogenic %bacteria% for improving the shelf life of a product containing the lysed culture.

#### French Abstract

Procede de lyse d'une culture de bacteries lactiques, ou d'un produit renfermant une telle culture, par exemple du fromage, a l'aide d'une lysine et au moyen de la production in situ d'une autolysine homologue ou d'une autolysine heterologue que l'on peut obtenir a partir de bacteries a Gram positif, et notamment a partir de bacteries lactiques. Le gene codant ladite autolysine est commande par un promoteur, de preference regule par des parametres ou ingredients de qualite alimentaire, afin d'assurer une lyse amelioree apres induction entrainant une production amelioree d'autolysine totale par rapport au taux de production naturelle de l'autolysine homologue pendant la fermentation ou peu apres celle-ci. Le procede s'applique egalement a la preparation d'un melange de peptides modifies par des peptidases liberees a la suite de la lyse, a l'aide de ladite autolysine servant d'agent bactericide dirige contre les bacteries perturbatrices ou pathogenes, dans le but d'ameliorer la duree de conservation d'un produit renfermant la culture lysee.

8/3,AB/29 (Item 17 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2003 WIPO/Univentio. All rts. reserv.

00258754

PRODUCTION OF DESIRED PROTEINS OR POLYPEPTIDES BY CULTURING A TRANSFORMED  
LACTIC ACID %BACTERIUM%  
PRODUCTION DE PROTEINES OU DE POLYPEPTIDES SOUHAITES PAR MISE EN CULTURE  
D'UNE BACTERIE D'ACIDE LACTIQUE TRANSFORMEE

Patent Applicant/Assignee:

UNILEVER PLC,  
UNILEVER N V,  
SEEGERS Jozef Franciscus M L,  
KIEWIET Rense,  
VENEMA Gerard,  
BRON Sierd,

Inventor(s):

SEEGERS Jozef Franciscus M L,  
KIEWIET Rense,  
VENEMA Gerard,  
BRON Sierd,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9406917 A1 19940331  
Application: WO 93EP2558 19930920 (PCT/WO EP9302558)  
Priority Application: AT 192202869 19920918

Designated States: AT AU BB BG BR BY CA CH CZ DE DK ES FI GB HU JP KP KR KZ  
LK LU MG MN MW NL NO NZ PL PT RO RU SD SE SK UA US VN AT BE CH DE DK ES  
FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

Publication Language: German

Fulltext Word Count: 21999

#### English Abstract

The invention provides a food-grade recombinant plasmid comprising (1) a replicon and DNA sequences derived from a lactic acid %bacterium% (LAB), required for stable maintenance in a LAB, preferably derived from plasmid pWVO2 from *L. lactis* subsp. *cremoris* Wg2, and (2) a structural gene encoding a desired protein or polypeptide or its precursor, not being an antibiotic resistance selection marker, and optionally (3) a food-grade selection marker, whereby said plasmid has a theta-replication mechanism and is stably maintained in the transformed LAB under non-selective conditions. Also provided is a LAB transformed by said recombinant plasmid and the use of such transformed LAB in a process for producing said protein or polypeptide. Said recombinant plasmid can also be used for modifying the metabolic pathway of a LAB, e.g. for producing diacetyl or a precursor thereof by a LAB. Also claimed are food and animal feed products obtained by incorporating therein said protein or polypeptide or precursor thereof produced by said transformed LAB.

#### French Abstract

L'invention decrit un plasme recombinant de qualite alimentaire comprenant premierement un replicon et des sequences d'ADN derives d'une bacterie d'acide lactique (BAL), necessaire a un maintien stable dans une BAL, de preference derive du plasme pWVO2 provenant de *L. lactis* sous-espece *cremoris* Wg2, et deuxiemement un gene structural encodant une proteine ou un polypeptide souhaitees ou bien leur precurseur, n'etant pas un marqueur de selection de resistance aux antibiotiques et, eventuellement troisiemement un marqueur de selection de qualite alimentaire, ledit plasme possedant de ce fait un mecanisme de replication theta et etant maintenu de maniere stable dans la BAL transformee dans des conditions non selectives. Sont egalement decrits une BAL transformee par ledit plasme recombinant, ainsi que l'utilisation de cette BAL transformee dans un procede pour produire ladite proteine ou ledit polypeptide. Ledit plasme recombinant peut egalement s'utiliser pour modifier la chaine metabolique d'une BAL, par exemple pour produire du diacetyle ou bien son precurseur a l'aide d'une BAL. Sont egalement revendiques des produits alimentaires et de la nourriture pour animaux obtenus par incorporation dans ceux-ci de ladite proteine ou dudit polypeptide ou bien de leur precurseur produits par ladite BAL transformee.

8/3,AB/30 (Item 18 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00184722

MODIFIED PROTEASES AND THEIR USE IN FOODSTUFFS  
PROTEASES MODIFIEES ET LEUR UTILISATION DANS LES DENREES ALIMENTAIRES

Patent Applicant/Assignee:

NEDERLANDS INSTITUUT VOOR ZUIVELONDERZOEK,  
VOS Petrus Antonius Josephina,  
SIEZEN Roelant Jan,  
DE VOS Willem Meindert,  
KOK Jan,  
VENEMA Gerhardus,  
HAANDRIKMAN Alfred Jacques,

Inventor(s):

VOS Petrus Antonius Josephina,  
SIEZEN Roelant Jan,  
DE VOS Willem Meindert,  
KOK Jan,  
VENEMA Gerhardus,  
HAANDRIKMAN Alfred Jacques,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9102064 A2 19910221  
Application: WO 90EP1302 19900802 (PCT/WO EP9001302)  
Priority Application: NL 892010 19890804

Designated States: AT AU BE CA CH DE DK ES FR GB IT JP LU NL SE US

Publication Language: English

## English Abstract

The invention relates to DNA fragments containing at least one "%mutant% protease gene", which "%mutant% protease gene" is understood to mean: a gene made up of sections of parent protease genes of several lactococcal strains, in particular of the parent protease genes of *L.lactis* subsp. *cremoris* Wg2 and *L.lactis* subsp. *cremoris* SK11, as well as a parent protease gene of a lactococcal strain, in particular the parent protease gene of *L.lactis* subsp. *cremoris* Wg2 or the parent protease gene of *L.lactis* subsp. *cremoris* SK11, the DNA sequence of which has been altered in a manner such that in the %mutant% protease for which the gene codes: (a) an amino acid other than that of the "wild-type" protease is present at at least one site, and/or (b) at at least one site within the first 1350 residues of the amino acid sequence, calculated from the N-terminus, at least one amino acid of the "wild-type" protease is missing and/or one or more amino acids have been inserted, or (c) at at least two sites separated from each other, one or more amino acids are missing and/or one or more amino acids have been inserted, the cloning vectors containing such a DNA fragment, the transformed host strains containing such a DNA fragment or vector, the %mutant% proteases obtainable as well as the foodstuffs and flavourings produced with the host strains or %mutant% proteases meant above.

## French Abstract

Fragment d'ADN contenant au moins un "gene de protease mutante", ledit "gene de protease mutante" comprenant: un gene compose de sections de genes de proteases genitrices de plusieurs souches lactococciques, notamment des genes de proteases genitrices de la sous espece *cremoris* Wg2 de *L.lactis* et de la sous-espece *cremoris* SK11 de *L.lactis*, ainsi qu'un gene de protease genitrice d'une souche lactococcique, notamment le gene de protease genitrice de la sous-espece *cremoris* Wg2 de *L.lactis* ou le gene de protease genitrice de la sous-espece *cremoris* SK11 de *L.lactis*, dont la sequence d'ADN a ete modifiee de sorte que la protease mutante pour laquelle le gene code: (a) un acide amine different de la protease de "type sauvage" est present au moins sur un site, et/ou (b) sur au moins un site se trouvant dans les premiers 1350 residus de la sequence d'acides amines, calcules a partir de la terminaison N, au moins un acide amine de la protease de "type sauvage" est manquant et/ou un ou plusieurs acides amines ont ete inseres, ou (c) sur au moins deux sites separes l'un de l'autre, un ou plusieurs acides amines sont manquants et/ou le ou les acides amines ont ete inseres, les vecteurs de clonage contenant ledit fragment d'ADN, les souches hautes transformees contenant ledit fragment d'ADN ou ledit vecteur, les proteases mutantes pouvant etre obtenues ainsi que les produits alimentaires et les aromes produits a l'aide des souches hautes ou des proteases mutantes precitees.

8/3,AB/31 (Item 1 from file: 654)  
 DIALOG(R)File 654:US PAT.FULL.  
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4532418

Derwent Accession: 2000-224178

Utility

C/ Non-virulent *Porphyromonas gingivalis* %mutant%

; %DECREASING MORBIDITY AND MORTALITY WITH INFECTION BY PORPHYROMONAS

Inventor: Fletcher, Hansel M., Loma Linda, CA

Assignee: Loma Linda University (02), Loma Linda, CA

Loma Linda University (Code: 50436)

Examiner: Saoud, Christine J. (Art Unit: 167)

Assistant Examiner: Turner, Sharon L.

Combined Principal Attorneys: Farah, David A.Sheldon &amp; Mak

	Publication Number	Kind	Date	Application Number	Filing Date
Main Patent	US 6254863	A	20010703	US 98133089	19980812

Fulltext Word Count: 6269

Abstract:

A non-virulent, recA defective %mutant% of Porphyromonas gingivalis. The Porphyromonas gingivalis strain which is deposited at ATCC under accession number 202109. Also a method of decreasing the growth rate or reproduction rate of Porphyromonas gingivalis in a mammal comprising the step of administering to the mammal at least one dose of Porphyromonas gingivalis according to the present invention. Further, a method of preventing or treating a Porphyromonas gingivalis infection such as periodontitis in a mammal comprising the step of administering to the mammal at least one dose of Porphyromonas gingivalis according to the present invention. Also, a pharmaceutical composition comprising a non-virulent, recA defective %mutant% of Porphyromonas gingivalis.

8/3,AB/32 (Item 2 from file: 654)  
DIALOG(R)File 654:US PAT.FULL.  
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4201686

Derwent Accession: 1996-010946

Utility

REASSIGNED

C/ Process for the lysis of a culture of lactic acid %bacteria% by means of a lysin, and uses of the resulting lysed culture

; %USING HO%MOLOGOUS AND HETEROLOGOUS PROTEOLYTIC ENZYMES FROM GRAM POSITIVE LACTOBACILLUS TO DISRUPT BACTERIAL CELL IN CULTURE; BACTERICIDES; TO PREVENT FOOD SPOILAGE AND IMPROVING SELF LIFE;FOOD PROCESSING OF CHEESE

Inventor: Buist, Girbe, Groningen, NL

Venema, Gerard, Haren, NL

Kok, Jan, Groningen, NL

Ledeboer, Adrianus Marinus, ML Rotterdam, NL

Assignee: Quest International B.V. (03), Naarden, NL

Quest International B V NL (Code: 37332)

Examiner: Ketter, James (Art Unit: 166)

Assistant Examiner: Sandals, William

Law Firm: Pillsbury Madison & Sutro LLP

	Publication Number	Kind	Date	Application Number	Filing Date
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Main Patent	US 5955258	A	19990921	US 97737716	19970422
PCT	WO 9531561		19951123	WO 95NL170	19950512
			371:19970422		
			102e:19970422		
Priority				EP 94201353	19940512

Fulltext Word Count: 16099

Abstract:

The invention provides a process for the lysis of a culture of lactic acid %bacteria%, or a product containing such culture e.g. cheese, by means of a lysin through the in situ production of a homologous autolysin, or a heterologous autolysin obtainable from Gram-positive %bacteria% esp. from lactic acid %bacteria%. The gene encoding said autolysin is controlled by a promoter, preferably regulated by food-grade ingredients or parameters, to achieve an enhanced lysis after induction resulting in an enhanced production of total autolysin compared with the natural production lever of the homologous autolysin during fermentation or shortly thereafter. Other uses of the invention include preparing a mixture of peptides which are modified by peptidases freed after the lysis, using the autolysin as a bactericidal agent against spoiling %bacteria% or pathogenic %bacteria% for improving the shelf life of a product containing the lysed culture.

8/3,AB/33 (Item 3 from file: 654)  
DIALOG(R)File 654:US PAT.FULL.  
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4064079

Derwent Accession: 1996-287181

Utility

C/ Cloned porphyromonas gingivalis genes and probes for the detection of  
periodontal disease

; DIAGNOSIS

Inventor: Progulske-Fox, Ann, Gainesville, FL

Tumwasorn, Somying, Bangkok, TH

Lepine, Guylaine, Fort Erie, CA

Han, Naiming, Gainesville, FL

Lantz, Marilyn, Indianapolis, IN

Patti, Joseph M., Missouri City, TX

Assignee: University of Florida (02), Gainesville, FL

UAB Research Foundation (02), Birmingham, AL

Alabama, University of (UAB) Research Foundation

Florida, University of (Code: 24503 31139)

Examiner: Loring, Susan A. (Art Unit: 161)

Combined Principal Attorneys: Bencen, Esq., Gerard H.; Bencen, P.A., Gerard  
H.

	Publication Number	Kind	Date	Application Number	Filing Date
Main Patent	US 5830710	A	19981103	US 94353485	19941209
Continuation	Abandoned			US 91647119	19910125
CIP	Pending			US 94250997	19940531
CIP	Abandoned			US 88241640	19880908

Fulltext Word Count: 17329

Abstract:

DNA fragments from Porphyromonas gingivalis which express proteins that  
elicit anti-P. gingivalis immunologic responses are described.

Microorganisms, genetically modified to express P. gingivalis antigens,  
are provided. Also disclosed are probes, vaccines, and monoclonal  
antibodies for the detection and prevention of periodontal disease.

8/3,AB/34 (Item 4 from file: 654)  
DIALOG(R)File 654:US PAT.FULL.  
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4057593

Derwent Accession: 1998-582627

Utility

C/ Cloned porphyromonas gingivalis genes and probes for the detection of  
periodontal disease

; VACCINES; GENETIC ENGINEERING

Inventor: Progulske-Fox, Ann, Gainesville, FL

Tumwasorn, Somying, Bangkok, TH

Lepine, Guylaine, Fort Erie, CA

Han, Naiming, Gainesville, FL

Lantz, Marilyn, Indianapolis, IN

Patti, Joseph M., Missouri City, TX

Assignee: University of Florida (02), Gainesville, FL

UAB Research Foundation (02), Birmingham, AL

Alabama, University of (UAB) Research Foundation

Florida, University of (Code: 24503 31139)

Examiner: Loring, Susan A. (Art Unit: 161)

Combined Principal Attorneys: Bencen, Esq., Gerard H.; Bencen, P.A., Gerard  
H.

Publication Number	Kind	Date	Application Number	Filing Date
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Main Patent	US 5824791	A	19981020	US 95570311	19951211
CIP	Pending			US 94353485	19941209
CIP	Abandoned			US 91647119	19910125
CIP	Abandoned			US 88241640	19880908

Fulltext Word Count: 20756

Abstract:

DNA fragments from Porphyromonas gingivalis which express proteins that elicit anti-P. gingivalis immunologic responses are described. Microorganisms, genetically modified to express P. gingivalis antigens, are provided. Also disclosed are probes, vaccines, and monoclonal antibodies for the detection and prevention of periodontal disease.

8/3,AB/35 (Item 1 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2003 European Patent Office. All rts. reserv.

01028636

Attaching substances to micro-organisms  
Befestigungs-Substanzen an Mikroorganismen  
Substances a propriete de fixation sur des microorganismes  
PATENT ASSIGNEE:

Rijksuniversiteit te Groningen, (406260), Broerstraat 5, 9712 CP  
Groningen, (NL), (applicant designated states:  
AT;BE;CH;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)

LEGAL REPRESENTATIVE:

Smulders, Theodorus A.H.J., Ir. et al (21191), Vereenigde Octrooibureaux  
Nieuwe Parklaan 97, 2587 BN 's-Gravenhage, (NL)  
PATENT (CC, No, Kind, Date): EP 916726 A1 990519 (Basic)  
APPLICATION (CC, No, Date): EP 97203539 971113;  
PRIORITY (CC, No, Date): EP 97203539 971113  
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU;  
MC; NL; PT; SE  
INTERNATIONAL PATENT CLASS: C12N-015/31; C12N-001/20; C07K-014/315;  
C07K-014/195; C07K-014/37; C12N-009/36; A61K-038/02; A23L-001/03;  
G01N-033/68; B01J-020/00;

ABSTRACT EP 916726 A1

The invention relates to surface display of proteins on micro-organisms via the targeting and anchoring of heterologous proteins to the outer surface of cells such as yeast, fungi, mammalian and plant cells, and %bacteria%. The invention provides a proteinaceous substance comprising a reactive group and at least one attaching peptide which comprises a stretch of amino acids having a sequence corresponding to at least a part of the consensus amino acid sequence listed in figure 10 and comprises a method for attaching a proteinaceous substance to the cell wall of a micro-organism comprising the use of said attaching peptide.

ABSTRACT WORD COUNT: 100

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9920	475
SPEC A	(English)	9920	12958
Total word count - document A			13433
Total word count - document B			0
Total word count - documents A + B			13433

8/3,AB/36 (Item 2 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2003 European Patent Office. All rts. reserv.

00428576

Modified proteases, process for their preparation and their use in



foodstuffs.

| Modifizierte Proteasen, Verfahren zu ihrer Herstellung und ihre Verwendung in Lebensmitteln.

| Proteases modifiees, procede pour leur preparation et leur utilisation dans les aliments.

| PATENT ASSIGNEE:

NEDERLANDS INSTITUUT VOOR ZUIVELONDERZOEK, (578581), Kernhemseweg 2 P.O. Box 20, NL-6710 BA Ede (Gld), (NL), (applicant designated states: GR)

INVENTOR:

Vos, Petrus Antonius Josephina, Charles Crammweg 6, NL-6871 HZ Heelsum, (NL)

Siezen, Roelant Jan, Eikelakkers 2, NL-6711 TE Ede, (NL)

De Vos, Willem Meindert, Langhoven 50, NL-6721 SJ Bennekom, (NL)

Kok, Jan, Soerabajastraat 57a, NL-9715 LR Groningen, (NL)

Venema, Gerhardus, Kerklaan 26, NL-9751 NN Haren, (NL)

Haandrikman, Alfred Jacques, Albrondaheerd 24, NL-9737 RB Groningen, (NL)

| LEGAL REPRESENTATIVE:

de Bruijn, Leendert C. et al (19641), Nederlandsch Octrooibureau

Scheveningseweg 82 P.O. Box 29720, NL-2502 LS 's-Gravenhage, (NL)

PATENT (CC, No, Kind, Date): EP 411715 A2 910206 (Basic)

EP 411715 A3 910410

APPLICATION (CC, No, Date): EP 90202113 900802;

PRIORITY (CC, No, Date): NL 892010 890804

| DESIGNATED STATES: GR

INTERNATIONAL PATENT CLASS: C12N-015/57; C12N-015/62; C12N-015/74;

C12N-001/21; C12N-009/52; A23L-001/226; C12N-001/21; C12R-001/225

ABSTRACT EP 411715 A2

The invention relates to DNA fragments containing at least one "%mutant% protease gene", which "%mutant% protease gene" is understood to mean:

- a gene made up of sections of parent protease genes of several lactococcal strains, in particular of the parent protease genes of L. lactis subsp. cremoris Wg2 and L. lactis subsp. cremoris SK11, as well as
- a parent protease gene of a lactococcal strain, in particular the parent protease gene of L. lactis subsp. cremoris Wg2 or the parent protease gene of L. lactis subsp. cremoris SK11, the DNA sequence of which has been altered in a manner such that in the "%mutant% protease" for which the gene codes:

(a) an amino acid other than that of the "wild-type" protease is present at at least one site, and/or

(b) at at least one site within the first 1350 residues of the amino acid sequence, calculated from the N-terminus, at least one amino acid of the "wild-type" protease is missing and/or one or more amino acids have been inserted, or

(c) at at least two sites separated from each other, one or more amino acids are missing and/or one or more amino acids have been inserted, the cloning vectors containing such a DNA fragment, the transformed host strains containing such a DNA fragment or vector, the "%mutant% proteases" obtainable as well as the foodstuffs and flavourings produced with the host strains or "%mutant% proteases" meant above.

ABSTRACT WORD COUNT: 242

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	1267
SPEC A	(English)	EPABF1	6992
Total word count - document A			8259
Total word count - document B			0
Total word count - documents A + B			8259

8/3,AB/37 (Item 1 from file: 484)

| DIALOG(R)File 484:Periodical Abs Plustext

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03421288 (USE FORMAT 7 OR 9 FOR FULLTEXT)

Fluorescence-based isolation of bacterial genes expressed within host cells  
Valdivia, Raphael H; Falkow, Stanley  
Science (GSCI), v277 n5334, p2007-2011, p.5  
Sep 26, 1997  
ISSN: 0036-8075 JOURNAL CODE: GSCI  
DOCUMENT TYPE: Feature  
LANGUAGE: English RECORD TYPE: Fulltext; Abstract  
WORD COUNT: 3020

ABSTRACT: A selection strategy was devised to identify bacterial genes preferentially expressed when a %bacterium% associates with its host cell. The selection methodology should be generally applicable to the identification of genes from pathogenic organisms that are induced upon association with host cells or tissues.

8/3,AB/38 (Item 1 from file: 371)  
000989468

Title: BACTERIES LACTIQUES MUTANTES CAPABLES DE SUREXPRIMER AU MOINS UNE PEPTIDASE

Patent Applicant/Assignee: INRA

Applicant Address: INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE INRA -  
Deposant - 147 RUE DE L UNIVERSITE 75341 PARIS CEDEX 07 (FR-75341)

Inventor(s): GUEDON ERIC - 26 RUE JULES FERRY 92100 BOULOGNE (FR-92100);  
ANBA MONDOLONI JAMILA - 13 RUE CHARLES LINNE 78180 MONTIGNY LE  
BRETONNEUX (FR-78180); DELORME CHRISTINE - 15 RESIDENCE DES BASSES  
GARENNES 91120 PALAISEAU (FR-91120); RENAULT PIERRE - 9 RUE MAGELLAN  
78180 MONTIGNY LE BRETONNEUX (FR-78180)

Legal Representative: BREESE MAJEROWICZ SIMONNOT

Document Type: Patent / Brevet

Patent and Priority Information (Country, Number, Date):

Patent: FR 2799766 - 20010420

Application: FR 9912924 - 19991015

Priority Application: FR 9912924 - 19991015

#### Abstract:

La presente invention se rapporte a des mutants de bacterie lactique, comme L. lactis ou S. thermophilus capables de surexprimer une ou plusieurs peptidases, caracterises en ce que l'un au moins des facteurs de regulation negative de l'un au moins des genes des peptidases de la dite bacterie est inactive.

Legal Status (Type, Action Date, BOPI No, Description):

Publication 20010420 0116 Date published

Search Report 20010420 0116 Date Search Report published

8/3,AB/39 (Item 1 from file: 266)

DIALOG(R)File 266:FEDRIP

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00316997

IDENTIFYING NO.: 5R01DE07256-19 AGENCY CODE: CRISP

FIBRINOGEN BINDING AND VIRULENCE OF P GINGIVALIS

PRINCIPAL INVESTIGATOR: LANTZ, MARILYN S

ADDRESS: mslantz@umich.edu Biologic & Materials Sciences Ann Arbor MI  
48109-1078

PERFORMING ORG.: UNIVERSITY OF MICHIGAN AT ANN ARBOR, ANN ARBOR, MICHIGAN

SPONSORING ORG.: NATIONAL INSTITUTE OF DENTAL & CRANIOFACIAL RESEARCH

DATES: 2009/01/84 TO 2001/31/04 FY: 2003

SUMMARY: Periodontitis continues to be a major cause of tooth loss in adults. Porphyromonas gingivalis (Pg) is an etiologic agent of periodontitis, however, the mechanisms by which it contributes to the tissue destruction characteristic of this disease remains unknown. The pathogenic mechanisms used by Pg must be understood at the molecular level before effective strategies to interfere with Pg-mediated tissue destruction can be designed. The long-range goal of this research is to design new Pg-specific anti-microbial agents to prevent the development and/or arrest the progression of periodontitis. Pg makes four closely

related proteinase/adhesin/hemagglutinins denoted %Prtp%, Rgp-1, Rgp-2, and HagA that appear to be important virulence factors of this pathogen. Preliminary studies suggest that interference with their functions interferes with the development of periodontitis in the cynomolgus monkey model of ligature-induced periodontitis. We have developed the first system for expression of catalytically active %Prtp%, Rgp-1, and Rgp-2 in a heterologous prokaryotic host. It will allow us to use molecular biological and genetic methods to sort out structure/function relationships among these proteins at a level not possible in the Pg background. Five Specific Aims are proposed: 1) Determine the proteinase properties and substrate specificities of recombinant (r)%Prtp%, rRgp-1, rRgp-2, and rHagA, as well as the ability of each to mediate hemagglutination and bind and adhere to extracellular matrix and plasma proteins; 2) Characterize the structural and functional domains of the three recombinant proteinases and recombinant HagA, by (A) determining the identify of the limit peptides comprising the catalytic domains of rPrtp, rRgp-1, and rRgp-2, as well as the identify of the catalytic Cys and His residues of these proteinases, and (B) determining the limit peptides of the hemagglutinin and/or adhesin domains of rPrtp, rRgp-1, and rHagA; 3) Construct and characterize isogenic strains of Pg defective in the expression of %prtp%, rgp-1, rgp-2, and hagA, individually and in combination; 4) Use the Bacteroides fragilis expression system and the constructs obtained in Aim 2 and Aim 3 to examine the effects of each of these proteins on the extent of processing of the other three; 5) Examine transcription of these genes in wild type Pg, in Pg knockout mutants, and in the Bf expression system to (A) determine the number and sizes of transcripts made from %prtp%, rgp-1, rgp-2, and hagA, (B) construct transcript-specific probes, and (C) determine whether Bf is a good model in which to study transcription of Pg virulence genes.

?

et	Items	Description
S1	1125	B RTP
S2	605	RD (unique items)
S3	573414	S2 AND BACTERIA OR BACTERIUM
S4	122	S3 AND S2
S5	52	S2 AND LACTIC
S6	52	RD (unique items)

? s s6 and mutant  
52 S6  
1131245 MUTANT  
S7 14 S6 AND MUTANT  
? t s7/3,ab/1-14  
>>>No matching display code(s) found in file(s): 65, 180, 225, 342, 398,  
515-516, 518, 810, 813

7/3,AB/1 (Item 1 from file: 440)  
DIALOG(R)File 440:Current Contents Search(R)  
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12532714 References: 16  
TITLE: Network of regulation of gene transcription of the proteolytic  
system of Lactococcus lactis  
AUTHOR(S): Guedon E; Martin C; Gobert FX; Ehrlich SD; Renault P; Delorme  
C (REPRINT)  
AUTHOR(S) E-MAIL: delorme@biotec.jouy.inra.fr  
CORPORATE SOURCE: INRA, Lab Genet Microbienne, Domaine de Vilvert/F-78352  
Jouy En Josas//France/ (REPRINT); INRA, Lab Genet Microbienne, /F-78352  
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PUBLICATION TYPE: JOURNAL  
PUBLICATION: LAIT, 2001, V81, N1-2 (JAN-APR), P65-74  
GENUINE ARTICLE#: 412HX  
PUBLISHER: E D P SCIENCES, 7, AVE DU HOGGAR, PARC D ACTIVITES COURTABOEUF,  
BP 112, F-91944 LES ULIS CEDEXA, FRANCE  
ISSN: 0023-7302  
LANGUAGE: French DOCUMENT TYPE: ARTICLE

ABSTRACT: The proteolytic system of lactococci that allows degradation of  
caseins and proteins of milk is complex. Milk proteins contain all amino  
acids necessary for growth of %lactic% acid bacteria. The proteolytic  
system consists of an extracellularly located proteinase, transport systems  
for di-tripeptides and oligopeptides and a multitude of intracellular  
peptidases. Expression of 13 genes was followed by transcriptional fusions  
in presence of different peptide sources. Transcription of 6 genes is  
repressed in media containing peptides and that of 4 genes (pepN, pepC,  
%prtP% and opp-pepO1 operon) by dipeptides containing one of the 3 branched  
amino acids (isoleucine, leucine and valine). Repression of gene  
transcription required that regulatory peptides are translocated into the  
cell and degraded in amino acids. Cell factors involved in this regulation  
were identified in derepressed mutants obtained by random mutagenesis by  
transposition. DtpT, a di-tripeptides transporter and CodY, homologous of  
the Bacillus subtilis pleiotropic regulator of transcription were the most  
frequently inactivated proteins. pepC, pepN and opp-pepO1 transcription is  
not repressed in codY and dtpT %mutant%. These genes of the proteolytic  
system belong to a same regulon since their expression is repressed by CodY  
regulator depending on intracellular concentration of branched amino acids  
or derivative products of them.

7/3,AB/2 (Item 1 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00876389  
USE OF ECTOENZYMES AND SECRETED ENZYMES TO MONITOR CELLULAR PROLIFERATION  
UTILISATION D'ECTOENZYMES ET D'ENZYMES SECRETEES POUR SUIVRE LA  
PROLIFERATION CELLULAIRE  
Patent Applicant/Assignee:  
ELITRA PHARMACEUTICALS INC, Suite A, 3510 Dunhill Street, San Diego, CA  
92121, US, US (Residence), US (Nationality), (For all designated states

except: US)  
Patent Applicant/Inventor:  
ZYSKIND Judith, 8514 La Jolla Scenic Drive, La Jolla, CA 92047, US, US  
(Residence), US (Nationality), (Designated only for: US)  
Legal Representative:  
HUNT Dale C (agent), 16th floor, 620 Newport Center Drive, Newport Beach,  
CA 92660, US,  
Patent and Priority Information (Country, Number, Date):  
Patent: WO 200210442 A1 20020207 (WO 0210442)  
Application: WO 2000US21049 20000802 (PCT/WO US0021049)  
Priority Application: WO 2000US21049 20000802  
Designated States: AE AG AL AM AT AT (utility model) AU AZ BA BB BG BR BY  
BZ CA CH CN CR CU CZ CZ (utility model) DE DE (utility model) DK DK  
(utility model) DM DZ EE EE (utility model) ES FI FI (utility model) GB  
GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KR (utility model) KZ LC LK  
LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK  
SK (utility model) SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE  
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM  
Publication Language: English  
Filing Language: English  
Fulltext Word Count: 31488

#### English Abstract

The present invention relates to methods of measuring cellular proliferation using ectoenzymes such as membrane-bound chitobiase (N,N'-diacetylchitobiase) and nucleic acids for use in such methods.

#### French Abstract

L'invention porte sur des procedes de mesure de la proliferation cellulaire a l'aide d'ectoenzymes telles que la chitobiase (N,N'-diacetylchitobiase) liee a la membrane, et d'acides nucleiques necessaires auxdits procedes.

7/3,AB/3 (Item 2 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00836656

METHOD OF TREATING PHENYLKETONURIA AND MEANS THEREFOR  
METHODE ET MOYENS DE TRAITEMENT DE LA PHENYLKETONURIE

Patent Applicant/Assignee:

NILAB APS, Toftegardsvej 16, DK-5500 Middelfart, DK, DK (Residence), DK  
(Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

JOHNSEN Mads, Sveasvej 5, 3. th, DK-1917 Frederiksberg C, DK, DK  
(Residence), DK (Nationality), (Designated only for: US)  
RAVN Peter, Erikaparken 59, 1.th., DK-2820 Gentofte, DK, DK (Residence),  
DK (Nationality), (Designated only for: US)  
MADSEN Soren Michael, Baldersgade 11, 1. th., DK-2200 Copenhagen N, DK,  
DK (Residence), DK (Nationality), (Designated only for: US)  
VRANG Astrid, Langs Hegnet 76, DK-2800 Lyngby, DK, DK (Residence), DK  
(Nationality), (Designated only for: US)  
ISRAELSEN Hans, Provstensvej 1A, DK-3450 Allerod, DK, DK (Residence), DK  
(Nationality), (Designated only for: US)  
BREDMOSE Lars, Brynhildegade 9, 3. tv., DK-2200 Copenhagen N, DK, DK  
(Residence), DK (Nationality), (Designated only for: US)  
ARNAU Jose, Melvillevej 9, DK-2900 Hellerup, DK, DK (Residence), ES  
(Nationality), (Designated only for: US)  
JENSEN Stein Hojmark, Toftegardsvej 16, DK-5500 Middelfart, DK, DK  
(Residence), DK (Nationality), (Designated only for: US)  
GJETTING Torben, Vibevej 7, DK-4040 Jyllinge, DK, DK (Residence), DK  
(Nationality), (Designated only for: US)  
NIELSEN Egon, Niels W. Gades Gade 33, DK-2100 Copenhagen O, DK, DK  
(Residence), DK (Nationality), (Designated only for: US)

Legal Representative:

PLOUGMANN & VINGTOFT A S (agent), Sankt Annae Plads 11, P.O. Box 3007,  
DK-1021 Copenhagen K, DK,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200168822 A2-A3 20010920 (WO 0168822)  
Application: WO 2001DK172 20010314 (PCT/WO DK0100172)  
Priority Application: US 2000525116 20000314

Designated States: AE AG AL AM AT AT (utility model) AU AZ BA BB BG BR BY  
BZ CA CH CN CR CU CZ CZ (utility model) DE DE (utility model) DK DK  
(utility model) DM DZ EE EE (utility model) ES FI FI (utility model) GB  
GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA  
MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SK (utility model)  
SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 19770

English Abstract

Novel cells expressing phenylalanine hydroxylase activity and novel fusion proteins comprising, in addition to the phenylalanine hydroxylase activity, a polypeptide enhancing and/or stabilising the phenylalanine hydroxylase activity are provided. The cells are useful for treatment of phenylketonuria (PKU) that is caused by genetically conditioned metabolic disorders in humans and animals resulting in an accumulation in the body of phenylalanine. The cells and/or proteins may be administered directly to the PKU patients to effect conversion of phenylalanine in the body, or added to proteinaceous food products in order to reduce the content of phenylalanine.

French Abstract

L'invention concerne des cellules exprimant une activite de la phenylalanine-hydroxylase et des proteines hybrides comprenant, en plus de l'activite de phenylalanine-hydroxylase, un polypeptide renforçant et/ou stabilisant cette derniere. Lesdites cellules s'avèrent utiles dans le traitement de la phenylcetonurie, causee par des troubles du metabolisme conditionnes genetiquement chez les humains et les animaux, et resultant d'une accumulation de phenylalanine dans le corps. Ces cellules et/ou proteines peuvent etre administrees directement aux patients atteints de phenylcetonurie pour provoquer la conversion de la phenylalanine dans le corps, ou elles peuvent etre additionnees a des produits alimentaires proteiniques pour reduire le taux de phenylalanine.

7/3,AB/4 (Item 3 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00796874

%MUTANT% %LACTIC% BACTERIA WITH A CAPACITY FOR OVEREXPRESSING AT LEAST ONE PEPTIDASE

BACTERIES LACTIQUES MUTANTES CAPABLES DE SUREXPRIMER AU MOINS UNE PEPTIDASE

Patent Applicant/Assignee:

INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE -INRA-, 147, rue de  
l'Universite, F-75338 Paris Cedex 07, FR, FR (Residence), FR  
(Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

GUEDON Eric, 26, rue Jules Ferry, F-92100 Boulogne, FR, FR (Residence),  
FR (Nationality), (Designated only for: US)

ANBA-MONDOLONI Jamila, 13, rue Charles Linne, F-78180  
Montigny-le-Bretonneux, FR, FR (Residence), FR (Nationality),  
(Designated only for: US)

DELORME Christine, 15, residence des Basses Garennes, F-91120 Palaiseau,  
FR, FR (Residence), FR (Nationality), (Designated only for: US)

RENAULT Pierre, 9, rue Magellan, F-78180 Montigny-le-Bretonneux, FR, FR  
(Residence), FR (Nationality), (Designated only for: US)

Legal Representative:

BREESE-MAJEROWICZ (agent), 3, avenue de l'Opera, F-75001 Paris, FR,  
Patent and Priority Information (Country, Number, Date):  
Patent: WO 200129183 A2-A3 20010426 (WO 0129183)  
Application: WO 2000FR2869 20001013 (PCT/WO FR0002869)  
Priority Application: FR 9912924 19991015  
Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ  
DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ  
LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG  
SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE  
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM  
Publication Language: French  
Filing Language: French  
Fulltext Word Count: 7040

#### English Abstract

The invention relates to mutants of %lactic% bacteria such as L. lactis or S. thermophilus which can overexpress one or more peptidases, characterised in that at least one of the negative regulation factors of at least one of the peptidase genes of said bacteria is inactivated, said negative regulation factor being selected from a group comprising the gene codY, the genes of the operon lev, and a gene coding for a protein that is homologous with a beta-glucosidase.

#### French Abstract

La presente invention se rapporte a des mutants de bacteries lactiques, comme L. lactis ou S. thermophilus capables de surexprimer une ou plusieurs peptidases, caracterises en ce que l'un au moins des facteurs de regulation negative de l'un au moins des genes des peptidases desdites bacteries est inactive, ledit facteur de regulation negative etant choisi dans le groupe comprenant le gene codY, les genes de l'operon lev, un gene codant une proteine homologue a une beta-glucosidase.

7/3,AB/5 (Item 4 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00777600

METHOD OF ISOLATING SECRETION SIGNALS IN %LACTIC% ACID BACTERIA AND NOVEL  
SECRETION SIGNALS ISOLATED FROM LACTOCOCCUS LACTIS  
PROCEDE D'ISOLEMENT DE SIGNAUX DE SECRETION DANS DES BACTERIES D'ACIDE  
LACTIQUE ET NOUVEAUX SIGNAUX DE SECRETION ISOLEES ISSUS DE LACTOCOCCUS  
LACTIS

#### Patent Applicant/Assignee:

BIOTEKNOLOGISK INSTITUT, Kogle Alle 2, DK-2970 Hoersholm, DK, DK  
(Residence), DK (Nationality), (For all designated states except: US)

#### Patent Applicant/Inventor:

RAVN Peter, Hegnsvej 123, DK-2850 Naerum, DK, DK (Residence), DK  
(Nationality), (Designated only for: US)  
MADSEN Soeren Michael, 1st floor, Baldersgade 11, DK-2200 Copenhagen N,  
DK, DK (Residence), DK (Nationality), (Designated only for: US)  
VRANG Astrid, Langs Hegnet 76, DK-2800 Lyngby, DK, DK (Residence), DK  
(Nationality), (Designated only for: US)  
ISRAELSEN Hans, Proevstensvej 1A, DK-3450 Allerod, DK, DK (Residence),  
DK (Nationality), (Designated only for: US)  
JOHNSEN Mads Groenvold, Sveasvej 5, 3rd floor, DK-1917 Frederiksberg C,  
DK, DK (Residence), DK (Nationality), (Designated only for: US)  
BREDMOSE Lars, Brynhildegade 9, 3rd floor, DK-2200 Copenhagen N, DK, DK  
(Residence), DK (Nationality), (Designated only for: US)  
ARNAU Jose, Melvillevej 9, DK-2900 Hellerup, DK, DK (Residence), ES  
(Nationality), (Designated only for: US)

#### Legal Representative:

PLOUGMANN VINGTOFT & PARTNERS A S (agent), Sankt Annae Plads 11, P.O. Box  
3007, DK-1021 Copenhagen K, DK,  
Patent and Priority Information (Country, Number, Date):  
Patent: WO 200111060 A2-A3 20010215 (WO 0111060)

Application: WO 2000DK437 20000804 (PCT/WO DK0000437)  
Priority Application: DK 991105 19990806  
Designated States: AE AG AL AM AT AT (utility model) AU AZ BA BB BG BR BY  
BZ CA CH CN CR CU CZ CZ (utility model) DE DE (utility model) DK DK  
(utility model) DM DZ EE EE (utility model) ES FI FI (utility model) GB  
GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KR (utility model) KZ LC LK  
LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK  
SK (utility model) SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE  
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM  
Publication Language: English  
Filing Language: English  
Fulltext Word Count: 14970

#### English Abstract

A method of identifying nucleotide sequences coding for signal peptides in lactic acid bacteria, using a DNA molecule comprising a transposon including a promoterless reporter gene from which DNA molecule a region between the LR and the reporter gene is deleted and the DNA molecule comprises a DNA sequence coding for a secretion reporter molecule. By deleting the region between the LR and the reporter gene, stop codons in-frame with the secretion reporter molecule is removed which upon transposition permits translational fusions from upstream the LR.

#### French Abstract

L'invention concerne un procede d'identification de sequences nucleotidiques codant pour des peptides signaux dans des bacteries d'acide lactique, qui utilise une molecule d'ADN contenant un transposon qui inclut un gene rapporteur sans promoteur ; une region de cette molecule d'ADN, situee entre l'extremite terminale gauche et le gene rapporteur, est deletee et la molecule d'ADN comporte une sequence d'ADN codant pour une molecule rapporteur de secretion. La deletion de la region situee entre l'extremite terminale gauche et le gene rapporteur permet d'eliminer les codons de terminaison situes dans le meme cadre de lecture que la molecule rapporteur de secretion, ce qui, au cours d'une transposition, permet des fusions traductionnelles a partir d'une region situee en aval de l'extremite terminale gauche.

7/3,AB/6 (Item 5 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT  
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00494484

ATTACHING SUBSTANCES TO MICRO-ORGANISMS  
FIXATION DE SUBSTANCES A DES MICRO-ORGANISMES

Patent Applicant/Assignee:

RIJKSUNIVERSITEIT GRONINGEN,  
BUIST Girbe,  
LEENHOUTS Cornelis Johannes,  
VENEMA Gerard,  
KOK Jan,

Inventor(s):

BUIST Girbe,  
LEENHOUTS Cornelis Johannes,  
VENEMA Gerard,  
KOK Jan,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9925836 A1 19990527  
Application: WO 98NL655 19981112 (PCT/WO NL9800655)  
Priority Application: EP 97203539 19971113

Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES  
FI GB GD GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV  
MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG  
US UZ VN YU ZW GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT  
BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA  
GN GW ML MR NE SN TD TG



#### English Abstract

The invention relates to surface display of proteins on micro-organisms via the targeting and anchoring of heterologous proteins to the outer surface of cells such as yeast, fungi, mammalian and plant cells, and bacteria. The invention provides a proteinaceous substance comprising a reactive group and at least one attaching peptide which comprises a stretch of amino acids having a sequence corresponding to at least a part of the consensus amino acid sequence listed in figure 10 and comprises a method for attaching a proteinaceous substance to the cell wall of a micro-organism comprising the use of said attaching peptide.

#### French Abstract

Cette invention a trait a une technique permettant de faire apparaitre des proteines a la surface de micro-organismes par ciblage de proteines heterologues et ancrage de celles-ci a la surface exterieure de cellules, notamment des levures, des cellules de champignons, de vegetaux et de mammiferes, ainsi qu'a la surface exterieure de bacteries. Elle concerne egalement une substance proteinique possedant un groupe reactif et au moins un peptide de fixation qui comporte une extension d'acides amines possedant une sequence correspondant a au moins une partie de la sequence consensus aminoacide representee dans la figure 10. L'invention porte, de surcroit, sur une technique permettant de fixer une substance proteinique a la paroi cellulaire d'un micro-organisme en faisant intervenir ledit peptide de fixation.

7/3,AB/7 (Item 6 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT  
(c) 2003 WIPO/Univentio. All rts. reserv.

00397844

METHODS FOR PRODUCING DAIRY PRODUCTS, IN PARTICULAR CHEESE USING %LACTIC% ACID BACTERIA PROVIDED WITH ADDITIONAL NEUTRAL PROTEASE ACTIVITY  
PROCEDE DE PRODUCTION DE PRODUITS LAITIERS, NOTAMMENT DE FROMAGE, A PARTIR DE BACTERIES D'ACIDE LACTIQUE POSSEDANT UNE ACTIVITE COMPLEMENTAIRE DE PROTEASE NEUTRE

Patent Applicant/Assignee:

FRIESLAND BRANDS B V,  
MIERAU Igor,  
VAN DEN BURG Lambertus,  
KOK Jan,  
VENEMA Gerhardus,

Inventor(s):

MIERAU Igor,  
VAN DEN BURG Lambertus,  
KOK Jan,  
VENEMA Gerhardus,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9738587 A1 19971023  
Application: WO 97NL192 19970415 (PCT/WO NL9700192)  
Priority Application: NL 96200948 19960415

Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES  
FI GB GE GH HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN  
MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG US UZ VN YU GH  
KE LS MW SD SZ UG AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB  
GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

Publication Language: English  
Fulltext Word Count: 9896

#### English Abstract

The present invention relates to a method for carrying out a process of biotransformation of a substrate whereby at least one %lactic% acid bacterium comprising a gene encoding a neutral protease having an altered resulting activity, e.g. a neutral protéase having an altered stability and/or specificity, is used. Further, a food product, e.g. a cheese, obtainable by the said method is disclosed.

French Abstract.

Cette invention concerne un procede permettant de realiser un processus de transformation biologique d'un substrat. Ce procede fait appel a une ou plusieurs bacteries d'acide lactique, lesquelles comprennent un gene qui code une protease neutre possedant une activite finale modifiee comme, par exemple, une protease neutre possedant une stabilite et/ou une specificite modifiee. Cette invention concerne egalement un produit alimentaire, tel que du fromage, obtenu d'apres ce procede.

7/3,AB/8 (Item 7 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT  
(c) 2003 WIPO/Univentio. All rts. reserv.

00313408

PROCESS FOR THE LYSIS OF A CULTURE OF %LACTIC% ACID BACTERIA BY MEANS OF A  
LYSIN, AND USES OF THE RESULTING LYSED CULTURE  
PROCEDE DE LYSE D'UNE CULTURE DE BACTERIES LACTIQUES A L'AIDE D'UNE LYSINE,  
ET APPLICATIONS DE LA CULTURE LYSEE AINSI OBTENUE

Patent Applicant/Assignee:

QUEST INTERNATIONAL B V,  
BUIST Girbe,  
VENEMA Gerard,  
KOK Jan,  
LEDEBOER Aat M,

Inventor(s):

BUIST Girbe,  
VENEMA Gerard,  
KOK Jan,  
LEDEBOER Aat M,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9531561 A1 19951123  
Application: WO 95NL170 19950512 (PCT/WO NL9500170)  
Priority Application: AT 394201353 19940512

Designated States: AU JP US AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE

Publication Language: English

Fulltext Word Count: 23360

English Abstract

The invention provides a process for the lysis of a culture of %lactic% acid bacteria, or a product containing such culture e.g. cheese, by means of a lysin through the in situ production of a homologous autolysin, or a heterologous autolysin obtainable from Gram-positive bacteria esp. from %lactic% acid bacteria. The gene encoding said autolysin is controlled by a promoter, preferably regulated by food-grade ingredients or parameters, to achieve an enhanced lysis after induction resulting in an enhanced production of total autolysin compared with the natural production level of the homologous autolysin during fermentation or shortly thereafter. Other uses of the invention include preparing a mixture of peptides which are modified by peptidases freed after the lysis, using the autolysin as a bactericidal agent against spoiling bacteria or pathogenic bacteria for improving the shelf life of a product containing the lysed culture.

French Abstract

Procede de lyse d'une culture de bacteries lactiques, ou d'un produit renfermant une telle culture, par exemple du fromage, a l'aide d'une lysine et au moyen de la production in situ d'une autolysine homologue ou d'une autolysine heterologue que l'on peut obtenir a partir de bacteries a Gram positif, et notamment a partir de bacteries lactiques. Le gene codant ladite autolysine est commande par un promoteur, de preference regule par des parametres ou ingredients de qualite alimentaire, afin d'assurer une lyse amelioree apres induction entrainant une production amelioree d'autolysine totale par rapport au taux de production naturelle de l'autolysine homologue pendant la fermentation ou peu apres celle-ci. Le procede s'applique egalement a la preparation d'un melange de peptides modifies par des peptidases liberees a la suite de la lyse, a l'aide de ladite autolysine servant d'agent bactericide dirige contre les bacteries perturbatrices ou pathogenes, dans le but d'ameliorer la duree de

conservation d'un produit renfermant la culture lysee.

7/3,AB/9 (Item 8 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

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00258754

PRODUCTION OF DESIRED PROTEINS OR POLYPEPTIDES BY CULTURING A TRANSFORMED  
%LACTIC% ACID BACTERIUM

PRODUCTION DE PROTEINES OU DE POLYPEPTIDES SOUHAITES PAR MISE EN CULTURE  
D'UNE BACTERIE D'ACIDE LACTIQUE TRANSFORMEE

Patent Applicant/Assignee:

UNILEVER PLC,  
UNILEVER N V,  
SEEGERS Jozef Franciscus M L,  
KIEWIET Rense,  
VENEMA Gerard,  
BRON Sierd,

Inventor(s):

SEEGERS Jozef Franciscus M L,  
KIEWIET Rense,  
VENEMA Gerard,  
BRON Sierd,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9406917 A1 19940331

Application: WO 93EP2558 19930920 (PCT/WO EP9302558)

Priority Application: AT 192202869 19920918

Designated States: AT AU BB BG BR BY CA CH CZ DE DK ES FI GB HU JP KP KR KZ

LK LU MG MN MW NL NO NZ PL PT RO RU SD SE SK UA US VN AT BE CH DE DK ES

FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

Publication Language: German

Fulltext Word Count: 21999

#### English Abstract

The invention provides a food-grade recombinant plasmid comprising (1) a replicon and DNA sequences derived from a %lactic% acid bacterium (LAB), required for stable maintenance in a LAB, preferably derived from plasmid pWVO2 from *L. lactis* subsp. *cremoris* Wg2, and (2) a structural gene encoding a desired protein or polypeptide or its precursor, not being an antibiotic resistance selection marker, and optionally (3) a food-grade selection marker, whereby said plasmid has a theta-replication mechanism and is stably maintained in the transformed LAB under non-selective conditions. Also provided is a LAB transformed by said recombinant plasmid and the use of such transformed LAB in a process for producing said protein or polypeptide. Said recombinant plasmid can also be used for modifying the metabolic pathway of a LAB, e.g. for producing diacetyl or a precursor thereof by a LAB. Also claimed are food and animal feed products obtained by incorporating therein said protein or polypeptide or precursor thereof produced by said transformed LAB.

#### French Abstract

L'invention decrit un plasme recombinant de qualite alimentaire comprenant premierement un replicon et des sequences d'ADN derives d'une bacterie d'acide lactique (BAL), necessaire a un maintien stable dans une BAL, de preference derive du plasme pWVO2 provenant de *L. lactis* sous-espece *cremoris* Wg2, et deuxiemement un gene structural encodant une proteine ou un polypeptide souhaitees ou bien leur precurseur, n'etant pas un marqueur de selection de resistance aux antibiotiques et, eventuellement troisiemement un marqueur de selection de qualite alimentaire, ledit plasme possedant de ce fait un mecanisme de replication theta et etant maintenu de maniere stable dans la BAL transformee dans des conditions non selectives. Sont egalement decrits une BAL transformee par ledit plasme recombinant, ainsi que l'utilisation de cette BAL transformee dans un procede pour produire ladite proteine ou ledit polypeptide. Ledit plasme recombinant peut egalement s'utiliser pour modifier la chaine metabolique d'une BAL, par exemple pour produire du diacetyle ou bien son precurseur a l'aide d'une BAL. Sont egalement revendiques des produits alimentaires et de la

nourriture pour animaux obtenus par incorporation dans ceux-ci de ladite  
proteine ou dudit polypeptide ou bien de leur precurseur produits par  
ladite BAL transformee.

7/3,AB/10 (Item 9 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00184722

MODIFIED PROTEASES AND THEIR USE IN FOODSTUFFS  
PROTEASES MODIFIEES ET LEUR UTILISATION DANS LES DENREES ALIMENTAIRES

Patent Applicant/Assignee:

NEDERLANDS INSTITUUT VOOR ZUIVELONDERZOEK,  
VOS Petrus Antonius Josephina,  
SIEZEN Roelant Jan,  
DE VOS Willem Meindert,  
KOK Jan,  
VENEMA Gerhardus,  
HAANDRIKMAN Alfred Jacques,

Inventor(s):

VOS Petrus Antonius Josephina,  
SIEZEN Roelant Jan,  
DE VOS Willem Meindert,  
KOK Jan,  
VENEMA Gerhardus,  
HAANDRIKMAN Alfred Jacques,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9102064 A2 19910221  
Application: WO 90EP1302 19900802 (PCT/WO EP9001302)  
Priority Application: NL 892010 19890804

Designated States: AT AU BE CA CH DE DK ES FR GB IT JP LU NL SE US

Publication Language: English

Fulltext Word Count: 9159

#### English Abstract

The invention relates to DNA fragments containing at least one "%mutant% protease gene", which "%mutant% protease gene" is understood to mean: a gene made up of sections of parent protease genes of several lactococcal strains, in particular of the parent protease genes of *L.lactis* subsp. *cremoris* Wg2 and *L.lactis* subsp. *cremoris* SK11, as well as a parent protease gene of a lactococcal strain, in particular the parent protease gene of *L.lactis* subsp. *cremoris* Wg2 or the parent protease gene of *L.lactis* subsp. *cremoris* SK11, the DNA sequence of which has been altered in a manner such that in the %mutant% protease for which the gene codes: (a) an amino acid other than that of the "wild-type" protease is present at at least one site, and/or (b) at at least one site within the first 1350 residues of the amino acid sequence, calculated from the N-terminus, at least one amino acid of the "wild-type" protease is missing and/or one or more amino acids have been inserted, or (c) at at least two sites separated from each other, one or more amino acids are missing and/or one or more amino acids have been inserted, the cloning vectors containing such a DNA fragment, the transformed host strains containing such a DNA fragment or vector, the %mutant% proteases obtainable as well as the foodstuffs and flavourings produced with the host strains or %mutant% proteases meant above.

#### French Abstract

Fragment d'ADN contenant au moins un "gene de protease mutante", ledit "gene de protease mutante" comprenant: un gene compose de sections de genes de proteases genitrices de plusieurs souches lactococciques, notamment des genes de proteases genitrices de la sous espece *cremoris* Wg2 de *L.lactis* et de la sous-espece *cremoris* SK11 de *L.lactis*, ainsi qu'un gene de protease genitrice d'une souche lactococcique, notamment le gene de protease genitrice de la sous-espece *cremoris* Wg2 de *L.lactis* ou le gene de protease genitrice de la sous-espece *cremoris* SK11 de *L.lactis*, dont la sequence d'ADN a ete modifiee de sorte que la protease mutante pour laquelle le gene code: (a) un acide amine different de la protease de "type sauvage" est present au moins sur un site, et/ou (b)

sur au moins un site se trouvant dans les premiers 1350 residus de la sequence d'acides amines, calcules a partir de la terminaison N, au moins un acide amine de la protease de "type sauvage" est manquant et/ou un ou plusieurs acides amines ont ete inseres, ou (c) sur au moins deux sites separes l'un de l'autre, un ou plusieurs acides amines sont manquants et/ou le ou les acides amines ont ete inseres, les vecteurs de clonage contenant ledit fragment d'ADN, les souches hautes transformees contenant ledit fragment d'ADN ou ledit vecteur, les proteases mutantes pouvant etre obtenues ainsi que les produits alimentaires et les aromes produits a l'aide des souches hautes ou des proteases mutantes precitees.

7/3,AB/11 (Item 1 from file: 654)  
 DIALOG(R)File 654:US PAT.FULL.  
 (c) FORMAT ONLY 2003 THE DIALOG CORP. All rts. reserv.

4201686

Derwent Accession: 1996-010946

Utility

REASSIGNED

C/ Process for the lysis of a culture of %lactic% acid bacteria by means of a lysin, and uses of the resulting lysed culture

; %USING %HOMOLOGOUS AND HETEROLOGOUS PROTEOLYTIC ENZYMES FROM GRAM POSITIVE LACTOBACILLUS TO DISRUPT BACTERIAL CELL IN CULTURE; BACTERICIDES; TO PREVENT FOOD SPOILAGE AND IMPROVING SELF LIFE;FOOD PROCESSING OF CHEESE

Inventor: Buist, Girbe, Groningen, NL

Venema, Gerard, Haren, NL

Kok, Jan, Groningen, NL

Ledeboer, Adrianus Marinus, ML Rotterdam, NL

Assignee: Quest International B.V. (03), Naarden, NL

Quest International B V NL (Code: 37332)

Examiner: Ketter, James (Art Unit: 166)

Assistant Examiner: Sandals, William

Law Firm: Pillsbury Madison & Sutro LLP

	Publication Number	Kind	Date	Application Number	Filing Date
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Main Patent	US 5955258	A	19990921	US 97737716	19970422
PCT	WO 9531561		19951123	WO 95NL170	19950512
			371:19970422		
			102e:19970422		
Priority				EP 94201353	19940512

Fulltext Word Count: 16099

Abstract:

The invention provides a process for the lysis of a culture of %lactic% acid bacteria, or a product containing such culture e.g. cheese, by means of a lysin through the in situ production of a homologous autolysin, or a heterologous autolysin obtainable from Gram-positive bacteria esp. from %lactic% acid bacteria. The gene encoding said autolysin is controlled by a promoter, preferably regulated by food-grade ingredients or parameters, to achieve an enhanced lysis after induction resulting in an enhanced production of total autolysin compared with the natural production lever of the homologous autolysin during fermentation or shortly thereafter. Other uses of the invention include preparing a mixture of peptides which are modified by peptidases freed after the lysis, using the autolysin as a bactericidal agent against spoiling bacteria or pathogenic bacteria for improving the shelf life of a product containing the lysed culture.

7/3,AB/12 (Item 1 from file: 348)  
 DIALOG(R)File 348:EUROPEAN PATENTS  
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01028636

Attaching substances to micro-organisms

Befestigungs-Substanzen an Mikroorganismen  
Substances\_a propriete de fixation sur des microorganismes  
PATENT ASSIGNEE:

Rijksuniversiteit te Groningen, (406260), Broerstraat 5, 9712 CP  
Groningen, (NL), (applicant designated states:  
AT;BE;CH;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)

LEGAL REPRESENTATIVE:

Smulders, Theodorus A.H.J., Ir. et al (21191), Vereenigde Octrooibureaux  
Nieuwe Parklaan 97, 2587 BN 's-Gravenhage, (NL)

PATENT (CC, No, Kind, Date): EP 916726 A1 990519 (Basic)

APPLICATION (CC, No, Date): EP 97203539 971113;

PRIORITY (CC, No, Date): EP 97203539 971113

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU;  
MC; NL; PT; SE

INTERNATIONAL PATENT CLASS: C12N-015/31; C12N-001/20; C07K-014/315;

C07K-014/195; C07K-014/37; C12N-009/36; A61K-038/02; A23L-001/03;

G01N-033/68; B01J-020/00;

ABSTRACT EP 916726 A1

The invention relates to surface display of proteins on micro-organisms via the targeting and anchoring of heterologous proteins to the outer surface of cells such as yeast, fungi, mammalian and plant cells, and bacteria. The invention provides a proteinaceous substance comprising a reactive group and at least one attaching peptide which comprises a stretch of amino acids having a sequence corresponding to at least a part of the consensus amino acid sequence listed in figure 10 and comprises a method for attaching a proteinaceous substance to the cell wall of a micro-organism comprising the use of said attaching peptide.

ABSTRACT WORD COUNT: 100

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9920	475
SPEC A	(English)	9920	12958
Total word count - document A			13433
Total word count - document B			0
Total word count - documents A + B			13433

7/3,AB/13 (Item 2 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

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00428576

Modified proteases, process for their preparation and their use in foodstuffs.

Modifizierte Proteasen, Verfahren zu ihrer Herstellung und ihre Verwendung in Lebensmitteln.

Proteases modifiees, procede pour leur preparation et leur utilisation dans les aliments.

PATENT ASSIGNEE:

NEDERLANDS INSTITUUT VOOR ZUIVELONDERZOEK, (578581), Kernhemseweg 2 P.O.  
Box 20, NL-6710 BA Ede (Gld), (NL), (applicant designated states: GR)

INVENTOR:

Vos, Petrus Antonius Josephina, Charles Crammweg 6, NL-6871 HZ Heelsum,  
(NL)

Siezen, Roelant Jan, Eikelakkers 2, NL-6711 TE Ede, (NL)

De Vos, Willem Meindert, Langhoven 50, NL-6721 SJ Bennekom, (NL)

Kok, Jan, Soerabajastraat 57a, NL-9715 LR Groningen, (NL)

Venema, Gerhardus, Kerklaan 26, NL-9751 NN Haren, (NL)

Haandrikman, Alfred Jacques, Albrondaheerd 24, NL-9737 RB Groningen,  
(NL)

LEGAL REPRESENTATIVE:

de Bruijn, Leendert C. et al (19641), Nederlandsch Octrooibureau

Scheveningseweg 82 P.O. Box 29720, NL-2502 LS 's-Gravenhage, (NL)

PATENT (CC, No, Kind, Date): EP 411715 A2 910206 (Basic)

EP 411715 A3 910410

APPLICATION (CC, No, Date): EP 90202113 900802;

PRIORITY (CC, No, Date): NL 892010 890804

DESIGNATED STATES: GR

INTERNATIONAL PATENT CLASS: C12N-015/57; C12N-015/62; C12N-015/74;  
C12N-001/21; C12N-009/52; A23L-001/226; C12N-001/21; C12R-001/225

ABSTRACT EP 411715 A2

The invention relates to DNA fragments containing at least one "  
%mutant% protease gene", which "%mutant% protease gene" is understood to  
mean:

- a gene made up of sections of parent protease genes of several  
lactococcal strains, in particular of the parent protease genes of L.  
lactis subsp. cremoris Wg2 and L. lactis subsp. cremoris SK11, as well as
- a parent protease gene of a lactococcal strain, in particular the  
parent protease gene of L.lactis subsp. cremoris Wg2 or the parent  
protease gene of L.lactis subsp. cremoris SK11, the DNA sequence of which  
has been altered in a manner such that in the %mutant% protease for which  
the gene codes:

- (a) an amino acid other than that of the "wild-type" protease is  
present at at least one site, and/or

- (b) at at least one site within the first 1350 residues of the amino  
acid sequence, calculated from the N-terminus, at least one amino acid of  
the "wild-type" protease is missing and/or one or more amino acids have  
been inserted, or

- (c) at at least two sites separated from each other, one or more  
amino acids are missing and/or one or more amino acids have been  
inserted, the cloning vectors containing such a DNA fragment, the  
transformed host strains containing such a DNA fragment or vector, the  
%mutant% proteases obtainable as well as the foodstuffs and flavourings  
produced with the host strains or %mutant% proteases meant above.

ABSTRACT WORD COUNT: 242

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
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CLAIMS A	(English)	EPABF1	1267
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SPEC A	(English)	EPABF1	6992
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Total word count - document A	8259
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Total word count - document B	0
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Total word count - documents A + B	8259
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7/3,AB/14 (Item 1 from file: 371)

000989468

Title: BACTERIES LACTIQUES MUTANTES CAPABLES DE SUREXPRIMER AU MOINS UNE  
PEPTIDASE

Patent Applicant/Assignee: INRA

Applicant Address: INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE INRA -  
Deposant - 147 RUE DE L UNIVERSITE 75341 PARIS CEDEX 07 (FR-75341)

Inventor(s): GUEDON ERIC - 26 RUE JULES FERRY 92100 BOULOGNE (FR-92100);  
ANBA MONDOLONI JAMILA - 13 RUE CHARLES LINNE 78180 MONTIGNY LE  
BRETONNEUX (FR-78180); DELORME CHRISTINE - 15 RESIDENCE DES BASSES  
GARENNES 91120 PALAISEAU (FR-91120); RENAULT PIERRE - 9 RUE MAGELLAN  
78180 MONTIGNY LE BRETONNEUX (FR-78180)

Legal Representative: BREESE MAJEROWICZ SIMONNOT

Document Type: Patent / Brevet

Patent and Priority Information (Country, Number, Date):

Patent: FR 2799766 - 20010420

Application: FR 9912924 - 19991015

Priority Application: FR 9912924 - 19991015

Abstract:

La presente invention se rapporte a des mutants de bacterie lactique,  
comme L. lactis ou S. thermophilus capables de surexprimer une ou  
plusieurs peptidases, caracterises en ce que l'un au moins des facteurs  
de regulation negative de l'un au moins des genes des peptidases de la  
dite bacterie est inactive.

Legal Status (Type, Action Date, BOPI No, Description):

Publication 20010420 0116 Date published

Search Report 20010420 0116 Date Search Report published  
?



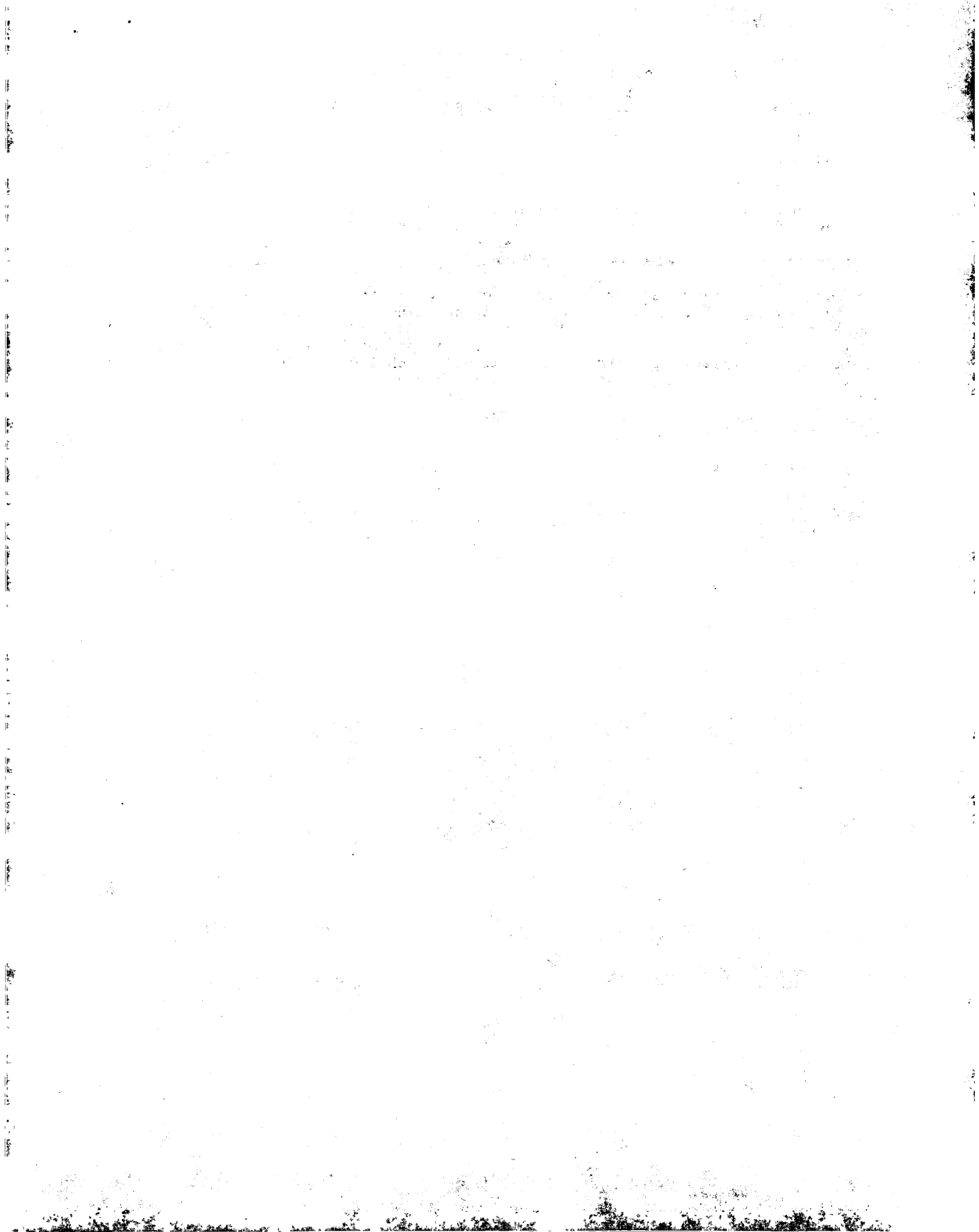
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S2      192    S1 AND GRAM (1W) POSITIVE
S3      155    RD (unique items)
S4      12     S3 AND LACTOBACILLUS
S5      12     RD (unique items)
S6      12     S3 AND LACTOCOCCUS
S7      12     RD (unique items)
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      155 S3
      439358 STREPTOCOCCUS
S8      124 S3 AND STREPTOCOCCUS
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S12     10 S11 NOT PY>1998
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Patent: WO 9831789 A1 19980723  
Application: WO 98US1244 19980116 (PCT/WO US9801244)  
Priority Application: US 9735391 19970116  
Designated States: CA JP AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE  
Publication Language: English  
Fulltext Word Count: 6918

#### English Abstract

The invention relates to Mycobacterium tuberculosis RNA polymerase  $\sigma$  subunit protein, DNA encoding, and methods of detecting inhibitors of the RNA polymerase.

#### French Abstract

L'invention porte sur une proteine d'une sous-unite sigma de la polymerase de l'ARN derivee de  $\sigma$  issu de Mycobacterium tuberculosis, sur le codage de l'ADN et sur des procedes de detection des inhibiteurs de la polymerase de l'ARN.

12/3,AB/3 (Item 2 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00429225

NOVEL CODING SEQUENCES  
NOUVELLES SEQUENCES CODANTES

Patent Applicant/Assignee:

SMITHKLINE BEECHAM CORPORATION,  
SMITHKLINE BEECHAM PLC,  
BLACK Michael Terance,  
HODGSON John Edward,  
KNOWLES David Justin Charles,  
LONETTO Michael Arthur,  
NICHOLAS Richard Oakley,  
REID Robert H Jr,  
ZARFOS Phillip N,

Inventor(s):

BLACK Michael Terance,  
HODGSON John Edward,  
KNOWLES David Justin Charles,  
LONETTO Michael Arthur,  
NICHOLAS Richard Oakley,  
REID Robert H Jr,  
ZARFOS Phillip N,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9819689 A1 19980514  
Application: WO 97US19226 19971027 (PCT/WO US9719226)  
Priority Application: US 9629930 19961101

Designated States: CA JP US AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT  
SE

Publication Language: English

Fulltext Word Count: 22154

#### English Abstract

This invention relates to newly identified Streptococcal polynucleotides, polypeptides encoded by such polynucleotides, the uses of such polynucleotides and polypeptides, as well as the production of such polynucleotides and polypeptides and recombinant host cells transformed with the polynucleotides. This invention also relates to inhibiting the biosynthesis or action of such polynucleotides or polypeptides and to the use of such inhibitors in therapy.

#### French Abstract

L'invention concerne des polynucleotides de streptocoque nouvellement identifies, des polypeptides codes par ces polynucleotides, l'utilisation et la fabrication desdits polypeptides et polynucleotides ainsi que des cellules de recombinaison transformees avec lesdits polynucleotides. L'invention concerne egalement l'inhibition de la biosynthese ou de l'action desdits polypeptides ou polynucleotides, ainsi que l'utilisation

therapeutique des inhibiteurs obtenus.

12/3,AB/4 (Item 3 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT  
(c) 2003 WIPO/Univentio. All rts. reserv.

00358433

RECOMBINANT BACTERIAL SYSTEM WITH ENVIRONMENTALLY LIMITED VIABILITY  
SYSTEME BACTERIEN RECOMBINE A VIABILITE LIMITEE PAR L'ENVIRONNEMENT

Patent Applicant/Assignee:

WASHINGTON UNIVERSITY,

Inventor(s):

CURTISS Roy III,

TINGE Steven A,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9640947 A1 19961219

Application: WO 96US9774 19960607 (PCT/WO US9609774)

Priority Application: US 95789 19950607

Designated States: AU CA CN HU IL JP MX NO NZ PL RU UA AT BE CH DE DK ES FI  
FR GB GR IE IT LU MC NL PT SE

Publication Language: English

Fulltext Word Count: 25346

#### English Abstract

Disclosed in an Environmentally Limited Viability System (ELVS) for microorganisms based on differences between permissive and non-permissive environments. Viability of the microorganisms are limited to a permissive environment by specifically expressing one or more essential genes only in the permissive environment, and/or expressing one or more lethal genes only in the non-permissive environment. Temporary viability in a non-permissive environment can be achieved by temporarily expressing one or more essential genes in a non-permissive environment, and/or temporarily delaying expression of one or more lethal genes in the non-permissive environment. Environmentally Limited Viability Systems are also disclosed involving coordinate expression of a combination of required genes and lethal genes. Microorganisms containing an Environmentally Limited Viability System are useful for release into permissive and non-permissive environments. Temperature regulated Environmentally Limited Viability Systems are particularly suited for delivery of expression products, such as antigens, using recombinant avirulent Salmonella by limiting their growth to the warmer environment inside the host, or by allowing growth for only a limited time in the host.

#### French Abstract

On decrit un systeme a viabilite limitee par l'environnement, destine a des micro-organismes et base sur des differences entre environnements tolerants et intolerants. La viabilite de ces micro-organismes est limitee a un environnement tolerant par l'expression precise d'un ou plusieurs genes essentiels seulement dans l'environnement tolerant, et/ou l'expression d'un ou plusieurs genes mortels seulement dans l'environnement intolerant. On peut obtenir une viabilite temporaire dans un environnement intolerant par l'expression temporaire d'un ou plusieurs genes essentiels dans cet environnement intolerant, et/ou en y retardant temporairement l'expression d'un ou plusieurs genes mortels. On decrit aussi des systemes a viabilite limitee par l'environnement, qui impliquent l'expression coordonnee d'une combinaison de genes necessaires et de genes mortels. Des micro-organismes contenant un systeme a viabilite limitee par l'environnement sont utiles puisqu'on peut les relacher dans des environnements tolerants et intolerants. Des systemes a viabilite limitee par l'environnement et regules par la temperature conviennent particulierement pour delivrer des produits d'expression, tels que des antigenes, en utilisant une Salmonella recombinée non virulente, dont on circonscrit la croissance a l'environnement chaud interieur a l'hôte, ou dont on ne permet la croissance chez cet hôte que pendant une duree limitee.

12/3,AB/5 (Item 4 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00357724

VECTORS FOR THE DIAGNOSIS AND TREATMENT OF SOLID TUMORS INCLUDING MELANOMA  
VECTEURS DESTINES AU DIAGNOSTIC ET AU TRAITEMENT DE TUMEURS SOLIDES  
NOTAMMENT DU MELANOME

Patent Applicant/Assignee:

YALE UNIVERSITY,

Inventor(s):

PAWELEK John M,  
BERMUDES David,  
LOW Kenneth B,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9640238 A1 19961219

Application: WO 96US10250 19960605 (PCT/WO US9610250)

Priority Application: US 95422 19950607; US 96658034 19960604

Designated States: AL AM AU AZ BB BG BR BY CA CN CZ EE FI GE HU IL IS JP KG  
KP KR KZ LK LR LS LT LV MD MG MK MN MX NO NZ PL RO RU SG SI SK TJ TM TR  
TT UA UZ VN KE LS MW SD SZ UG AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK  
ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN  
TD TG

Publication Language: English

Fulltext Word Count: 43247

#### English Abstract

The present invention is directed to the isolation and use of super-infective, tumor-specific vectors that are strains of parasites including, but not limited to, bacteria, fungi and protists. In certain embodiments, the parasites include, but are not limited to, the bacterium *Salmonella* spp., such as *Salmonella typhimurium*, the bacterium *Mycobacterium avium* and the protozoan *Leishmania amazonensis*. In other embodiments, the present invention is concerned with the isolation of super-infective, tumor-specific, suicide gene-containing strains of parasites for use in treatment of solid tumors.

#### French Abstract

La presente invention se rapporte a l'isolement et a l'utilisation de vecteurs specifiques de tumeurs et extremement infectieux, lesquels sont des souches de parasites comprenant de facon non limitative des bacteries, des champignons et des protistes. Dans certains modes de realisation, ces parasites comprennent, egalement de facon non limitative, la bacterie *Salmonella* spp., telle que *Salmonella typhimurium*, la bacterie *Mycobacterium avium* et le protozoaire *Leishmania amazonensis*. Dans d'autres modes de realisation, la presente invention concerne l'isolement de souches de parasites, lesquelles sont specifiques des tumeurs et extremement infectieuses, contiennent des genes suicides et sont utiles dans le traitement de tumeurs solides.

12/3,AB/6 (Item 5 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00350763

NUCLEOTIDE SEQUENCE OF THE HAEMOPHILUS INFLUENZAE Rd GENOME, FRAGMENTS  
THEREOF, AND USES THEREOF  
SEQUENCE NUCLEOTIDIQUE DU GENOME HAEMOPHILUS INFLUENZAE RD, DES FRAGMENTS  
DE CE DERNIER, AINSI QUE SES APPLICATIONS

Patent Applicant/Assignee:

HUMAN GENOME SCIENCES INC,  
JOHNS HOPKINS UNIVERSITY,

Inventor(s):

FLEISCHMANN Robert D,  
ADAMS Mark D,  
WHITE Owen,  
SMITH Hamilton O,  
VENTER J Craig,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9633276 A1 19961024  
Application: WO 96US5320 19960422 (PCT/WO US9605320)  
Priority Application: US 95426787 19950421; US 95476102 19950607; US  
95487429 19950607

Designated States: AL AM AT AU AZ BB BG BR BY CA CH CN CZ DE DK EE ES FI GB  
GE HU IS JP KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL  
PT RO RU SD SE SG SI SK TJ TM TR TT UA UG UZ VN KE LS MW SD SZ UG AM AZ  
BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE  
BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 283999

English Abstract

The present invention provides the sequencing of the entire genome of Haemophilus influenzae Rd, SEQ ID NO:1. The present invention further provides the sequence information stored on computer readable media, and computer-based systems and methods which facilitate its use. In addition to the entire genomic sequence, the present invention identifies over 1700 protein encoding fragments of the genome and identifies, by position relative to a unique Not I restriction endonuclease site, any regulatory elements which modulate the expression of the protein encoding fragments of the Haemophilus genome.

French Abstract

La presente invention porte sur le sequencage de la totalite du genome d'Haemophilus influenzae Rd, SEQ ID NO.1. Elle concerne egalement les donnees de sequencage enregistrees sur support informatique, ainsi que les systemes informatiques et les procedes facilitant son utilisation. Outre la totalite de la sequence genomique, plus de 1700 fragments a codage proteique du genome sont identifies. Est egalement identifie de par son positionnement par rapport a un site a enzyme de restriction Not I, tout element regulateur qui module l'expression des fragments a codage proteique du genome Haemophilus.

12/3,AB/7 (Item 6 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00320998

ANALOG OF HAEMOPHILUS HIN47 WITH REDUCED PROTEASE ACTIVITY

ANALOGUE D'HAEMOPHILUS HIN47 A ACTIVITE PROTEASE REDUITE

Patent Applicant/Assignee:

CONNAUGHT LABORATORIES LIMITED,  
LOOSMORE Sheena M,  
YANG Yan-Ping,  
CHONG Pele,  
OOMEN Raymond P,  
KLEIN Michel H,

Inventor(s):

LOOSMORE Sheena M,  
YANG Yan-Ping,  
CHONG Pele,  
OOMEN Raymond P,  
KLEIN Michel H,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9603506 A2 19960208  
Application: WO 95CA434 19950721 (PCT/WO CA9500434)  
Priority Application: US 94278091 19940721; US 94296149 19940826; US  
95487167 19950607

Designated States: AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU  
JP KE KG KP KR KZ LK LR LT LU LV MD MG MN MW MX NO NZ PL PT RO RU SD SE  
SI SK TJ TT UA US UZ VN KE MW SD SZ UG AT BE CH DE DK ES FR GB GR IE IT  
LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 12658

English Abstract

The invention concerns isolated and purified analogs of Haemophilus influenza Hin47 protein with decreased protease activity (of less than 10 % of that of the natural protein) but preferably retaining substantially the same immunogenic properties as natural Hin47. Preferred analogs have mutations at Ser197, His91 and/or Asp121 positions and are possibly used as chimeric proteins with other immunogenic molecules. Also disclosed are nucleic acid encoding said analogs, recombinant plasmids and transformed host cells containing said modified genes, immunogenic compositions containing Hin47 analogs or their nucleic acid and their use for prophylactic, vaccine or diagnostic purposes.

#### French Abstract

Analogues isoles et purifies de la proteine Haemophilus influenzae Hin47 presentant une activite protease reduite (inferieure a environ 10 % de celle de la proteine naturelle) et de preference sensiblement les memes proprietes immunogenes que la Hin47 naturelle. Les analogues preferes presentent des mutations au niveau des positions Ser197, His91 et/ou Asp121, et peuvent etre utilises comme des proteines chimeres avec d'autres moleculs immunogenes. L'invention porte egalement sur un acide nucleique codant lesdits analogues, des plasmides recombinés et des cellules hotes transformees contenant ledits genes modifiés, des compositions immunogenes comprenant les analogues de Hin47 ou leur acide nucleique ainsi que sur leur utilisation a des fins prophylactiques, diagnostiques ou de vaccination.

12/3,AB/8 (Item 1 from file: 654)  
 DIALOG(R)File 654:US PAT.FULL.  
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3884294

Derwent Accession: 1996-117051

Utility

CERTIFICATE OF CORRECTION

C/ Composition containing an analog of haemophilus Hin47 with reduced protease activity

Inventor: Loosmore, Sheena M., Aurora, CA

Yang, Yan-Ping, Willowdale, CA

Chong, Pele, Richmond Hill, CA

Oomen, Raymond P., Schomberg, CA

Klein, Michel H., Willowdale, CA

Assignee: Connaught Laboratories Limited (03), Willowdale, CA

Connaught Laboratories Ltd CA (Code: 19557)

Examiner: Hendricks, Keith D. (Art Unit: 184)

Law Firm: Sim & McBurney

	Publication Number	Kind	Date	Application Number	Filing Date
Main Patent	US 5665353	A	19970909	US 95472173	19950607
Continuation	Pending			US 94296149	19940826
CIP	US 5506139	A		US 94278091	19940721

Disclaimer Date: 20120607

Fulltext Word Count: 9536

#### Abstract:

An isolated and purified analog of Haemophilus influenzae Hin47 protein has a decreased protease activity which is less than about 10% of that of natural Hin47 protein and preferably substantially the same immunogenic properties as natural Hin47 protein. An isolated and purified nucleic acid molecule encoding the Hin47 analog may be provided in a recombinant plasmid which may be introduced into a cell which is grown to produce the Hin47 analog. Immunogenic compositions comprising the Hin47 analog and the encoding nucleic acid may be formulated as vaccines for in vivo administration to a host, including a human, to confer protection against diseases caused by a bacterial pathogen, including Haemophilus species, such as Haemophilus influenzae, that produces Hin47 protein or a protein

capable of inducing antibodies in the host specifically reactive with Hin47 protein. The Hin47 analog and the encoding nucleic acid also may be employed in diagnostic applications.

12/3,AB/9 (Item 2 from file: 654)  
DIALOG(R)File 654:US PAT.FULL.  
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3874267  
Derwent Accession: 1996-117051  
Utility  
C/ Analog of Haemophilus Hin47 with reduced protease activity  
Inventor: Loosmore, Sheena M., Aurora, CA  
Yang, Yan-Ping, Willowdale, CA  
Chong, Pele, Richmond Hill, CA  
Oomen, Raymond P., Schomberg, CA  
Klein, Michel H., Willowdale, CA  
Assignee: Connaught Laboratories Limited (03), North York  
Connaught Laboratories Ltd CA (Code: 19557)  
Examiner: Housel, James C. (Art Unit: 182)  
Assistant Examiner: Shaver, Jennifer  
Law Firm: Sim & McBurney

	Publication Number	Kind	Date	Application Number	Filing Date
Main Patent	US 5656436	A	19970812	US 95483859	19950607
Continuation	Pending			US 94296149	19940826
CIP	US 5506139	A		US 94278091	19940721

Fulltext Word Count: 9913

#### Abstract:

An isolated and purified analog of Haemophilus influenzae Hin47 protein has a decreased protease activity which is less than about 10% of that of natural Hin47 protein and preferably substantially the same immunogenic properties as natural Hin47 protein. An isolated and purified nucleic acid molecule encoding the Hin47 analog may be provided in a recombinant plasmid which may be introduced into a cell which is grown to produce the Hin47 analog. Immunogenic compositions comprising the Hin47 analog and the encoding nucleic acid may be formulated as vaccines for in vivo administration to a host, including a human, to confer protection against diseases caused by a bacterial pathogen, including Haemophilus species, such as Haemophilus influenzae, that produces Hin47 protein or a protein capable of inducing antibodies in the host specifically reactive with Hin47 protein. The Hin47 analog and the encoding nucleic acid also may be employed in diagnostic applications.

12/3,AB/10 (Item 3 from file: 654)  
DIALOG(R)File 654:US PAT.FULL.  
(c) FORMAT ONLY 2003 THE DIALOG CORP. All rts. reserv.

3711045  
Derwent Accession: 1996-117051  
Utility  
CERTIFICATE OF CORRECTION  
C/ Analog of haemophilus Hin47 with reduced protease activity  
; VACCINES, IMMUNOLOGY  
Inventor: Loosmore, Sheena M., Aurora, CA  
Yang, Yan-Ping, Willowdale, CA  
Chong, Pele, Richmond Hill, CA  
Oomen, Raymond P., Tottenham, CA  
Klein, Michel H., Willowdale, CA  
Assignee: Connaught Laboratories Limited (03), Willowdale, CA  
Connaught Laboratories Ltd CA (Code: 19557)  
Examiner: Wax, Robert A. (Art Unit: 184)



ds

Set	Items	Description
S1	2151	HTRA
S2	192	S1 AND GRAM (1W) POSITIVE
S3	155	RD (unique items)
S4	12	S3 AND LACTOBACILLUS
S5	12	RD (unique items)

? t s5/3,ab/1-12

>>>No matching display code(s) found in file(s): 65, 107, 128-129, 135, 225, 342, 345, 398, 449, 767

5/3,AB/1 (Item 1 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00968329

IMPROVED METHODS FOR BINDING ACMA-TYPE PROTEIN ANCHOR FUSIONS TO CELL-WALL MATERIAL OF MICRO-ORGANISMS

TECHNIQUE AMELIOREE PERMETTANT DE FIXER DES FUSIONS D'ANCRAGE DE PROTEINES DE TYPE ACMA A LA PAROI CELLULAIRE DE MICRO-ORGANISMES

Patent Applicant/Assignee:

APPLIED NANOSYSTEMS B V, Ubbo Emmiusingel 37, NL-9711 BC Groningen, NL, NL (Residence), NL (Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

LEENHOUTS Cornelis Johannes, Tussenkoelen 6, NL-9753 KX Haren, NL, NL (Residence), NL (Nationality), (Designated only for: US)

RAMASAMY Ranjan, 137/3 Kirula Road, Colombo 05, LK, LK (Residence), LK (Nationality), (Designated only for: US)

STEEN Anton, Zonland 143, NL-9734 BR Groningen, NL, NL (Residence), NL (Nationality), (Designated only for: US)

KOK Jan, Van Hamelstraat 34, NL-9714 HL Groningen, NL, NL (Residence), NL (Nationality), (Designated only for: US)

BUIST Girbe, Noordbroeksterstraat 88, NL-9611 BN Sappemeer, NL, NL (Residence), NL (Nationality), (Designated only for: US)

KUIPERS Oscar Paul, Lepelaar 95, NL-9728 XG Groningen, NL, NL (Residence), NL (Nationality), (Designated only for: US)

Legal Representative:

PRINS A W (agent), c/o Vereenigde, Nieuwe Parklaan 97, NL-2587 BN The Hague, NL,

Patent and Priority Information (Country, Number, Date):

Patent: WO 2002101026 A2 20021219 (WO 02101026)

Application: WO 2002NL383 20020611 (PCT/WO NL0200383)

Priority Application: EP 2001202239 20010611

Designated States: AE AG AL AM AT (utility model) AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ (utility model) CZ DE (utility model) DE DK (utility model) DK DM DZ EC EE (utility model) EE ES FI (utility model) FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK (utility model) SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR (OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW (EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 15714

English Abstract

The invention provides a method for improving binding of a proteinaceous substance to cell-wall material of a %Gram%-positive bacterium, said substance comprising an Acma cell wall binding domain or homolog or functional derivative thereof, said method comprising treating said cell-wall material with a solution capable of removing a cell-wall component such as a protein, (lipo) teichoic acid or carbohydrate from said cell-wall-material and contacting said substance with said cell-wall material.

French Abstract

La presente invention concerne une technique permettant d'ameliorer la liaison d'une substance proteinique a la paroi cellulaire d'une bacterie Gram positif, cette substance comprenant un domaine de fixation de paroi de cellule AcmA ou un homologue ou un derive fonctionnel de celui-ci. Cette technique consiste a traiter cette paroi cellulaire avec une solution capable de retirer un element de cette paroi cellulaire tel qu'une proteine, un acide (lipo)teichoique ou un element glucidique de cette paroi et de mettre en contact cette substance avec cette paroi cellulaire.

5/3,AB/2 (Item 2 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT  
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00926425

FUNCTIONAL BALANCED-LETHAL HOST-VECTOR SYSTEMS  
SYSTEMES D'HOTES-VECTEURS A STABILISATION LETALE FONCTIONNELLE  
Patent Applicant/Assignee:

WASHINGTON UNIVERSITY, One Brookings Drive, St. Louis, MO 63130, US, US  
(Residence), US (Nationality)

Inventor(s):

CURTISS Roy III, 6065 Lindell Boulevard, St. Louis, MO 63112, US,

Legal Representative:

KASTEN Daniel S (et al) (agent), Thompson Coburn LLP, One US Bank Plaza,  
St. Louis, MA 63101, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200259292 A2 20020801 (WO 0259292)

Application: WO 2001US42527 20011005 (PCT/WO US0142527)

Priority Application: US 2000686499 20001011

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU

CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP

KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU

SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 23219

#### English Abstract

The invention encompasses methods of maintaining desired recombinant genes in a genetic population of cells expressing the desired gene. The methods utilize microbial cells that have an inactivating mutation in a native essential gene encoding an enzyme which catalyzes a step in the biosynthesis of diaminopimelic acid (DAP). The cells also have an extrachromosomal vector that includes the desired gene and which is capable of homologous recombination with a chromosome of the microorganism. The vector also has a recombinant complementing gene encoding a functional replacement of the native essential gene. The cells of the invention are particularly useful for components of vaccines, including DNA vaccines.

#### French Abstract

L'invention porte sur des procedes de maintien de genes recombinants desires au sein d'une population genetique de cellules exprimant le gene desire. Ces procedes consistent a utiliser des cellules microbiennes qui presentent une mutation neutralisante dans un gene essentiel natif codant une enzyme qui sert de catalyseur au cours d'une etape dans la biosynthese d'acide diaminopimelique (DAP). Ces cellules contiennent egalement un vecteur extrachromosomique comprenant le gene desire et capable de recombinaison homologue avec un chromosome du micro-organisme. Ce vecteur presente egalement un gene complementaire recombinant codant un remplacement fonctionnel du gene essentiel natif. Les cellules susmentionnees sont particulierement utiles dans les composants de vaccins, y compris les vaccins ADN.

5/3,AB/3 (Item 3 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT  
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00917591

HELICOBACTER PROTEINS, NUCLEIC ACIDS AND USES THEREOF  
PROTEINES DE HELICOBACTER, ACIDES NUCLEIQUES ET LEURS APPLICATIONS

Patent Applicant/Assignee:

ANTEX BIOLOGICS INC, 300 Professional Drive, Gaithersburg, MD 20879, US,  
US (Residence), US (Nationality), (For all designated states except:  
US)

Patent Applicant/Inventor:

TIAN Jing-Hui, 603 Blandford Street, Apt. #4, Rockville, MD 20850, US, US  
(Residence), -- (Nationality), (Designated only for: US)  
WALKER Richard, 120 Briscoe Street, Gaithersburg, MD 20878, US, US  
(Residence), US (Nationality), (Designated only for: US)  
JACKSON W James, 1687 Armistice Way, Marriottsville, MD 21104, US, US  
(Residence), US (Nationality), (Designated only for: US)

Legal Representative:

BALDWIN Geraldine F (et al) (agent), Pennie & Edmonds LLP, 1155 Avenue of  
the Americas, New York, NY 10036, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200251237 A2 20020704 (WO 0251237)  
Application: WO 2001US48392 20011207 (PCT/WO US0148392)  
Priority Application: US 2000732091 20001207

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP  
KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO  
RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 36679

English Abstract

The invention discloses Helicobacter HP30 or HP56 polypeptide, polypeptides derived thereof (HP30-derived or HP56-derived polypeptides), nucleic acids encoding said polypeptides, antibodies that specifically bind the HP30, HP56, HP30-derived or HP56-derived polypeptides and T cells specific for HP30, HP56, HP30-derived or HP56-derived polypeptide. Also disclosed are prophylactic or therapeutic compositions, including immunogenic compositions, e.g. vaccines, comprising HP30, HP56, HP30-derived or HP56-derived polypeptides, nucleic acids encoding the same or antibodies thereto. The invention additionally discloses methods of inducing in animals an immune response to Helicobacter cells or antigens.

French Abstract

La presente invention concerne un polypeptide HP30 ou HP56 de Helicobacter, des polypeptides derives de ces derniers (polypeptides derives de HP30 ou de HP56), des acides nucleiques codant ces polypeptides, des anticorps qui se fixent de facon specifique sur les polypeptides HP30, HP56, derives de HP30 ou derives de HP56 et des lymphocytes T specifiques aux polypeptides HP30, HP56, derives de HP30 ou derives de HP56. L'invention concerne aussi des compositions preventives ou therapeutiques, y compris des compositions immunogenes, telles que des vaccins, comprenant les polypeptides HP30, HP56, derives de HP30 ou derives de HP56, des acides nucleiques codant ces derniers, ou des anticorps de ces derniers. L'invention concerne egalement des methodes permettant d'induire une reponse immune aux cellules ou aux antigenes Helicobacter chez des animaux.

5/3,AB/4 (Item 4 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT

00901997

NUCLEIC ACIDS AND PROTEINS FROM STREPTOCOCCUS GROUPS A & B  
ACIDES NUCLEIQUES ET PROTEINES DERIVES DES GROUPES DE STREPTOCOQUES A ET B  
Patent Applicant/Assignee:

CHIRON S P A, Via Fiorentina, 1, I-53100 Siena, IT, IT (Residence), IT  
(Nationality), (For all designated states except: US)  
THE INSTITUTE FOR GENOMIC RESEARCH, 9712 Medical Center Drive, Rockville,  
MD 20850, US, US (Residence), US (Nationality), (For all designated  
states except: US)

Patent Applicant/Inventor:

TELFORD John, Chiron S.p.a, Via Fiorentina, 1, I-53100 Siena, IT, IT  
(Residence), GB (Nationality), (Designated only for: US)  
MASIGNANI Vega, Chiron S.p.a, Via Fiorentina, 1, I-53100 Siena, IT, IT  
(Residence), IT (Nationality), (Designated only for: US)  
MARGARIT Y ROS Immaculada, Chiron S.p.a, Via Fiorentina, 1, I-53100 Siena  
, IT, IT (Residence), IT (Nationality), (Designated only for: US)  
GRANDI Guido, Chiron S.p.a, Via Fiorentina, 1, I-53100 Siena, IT, IT  
(Residence), IT (Nationality), (Designated only for: US)  
FRASER CLAIRE, The Institute for Genomic Research, 9712 Medical Center  
Drive, Rockville, MD 20850, US, US (Residence), US (Nationality),  
(Designated only for: US)  
TETTELIN Herve, The Institute for Genomic Research, 9712 Medical Center  
Drive, Rockville, MD 20850, US, US (Residence), BE (Nationality),  
(Designated only for: US)

Legal Representative:

HALLYBONE Huw George (et al) (agent), Carpmaels & Ransford, 43 Bloomsbury  
Square, London WC1A 2RA, GB,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200234771 A2-A3 20020502 (WO 0234771)  
Application: WO 2001GB4789 20011029 (PCT/WO GB0104789)  
Priority Application: GB 200026333 20001027; GB 200028727 20001124; GB  
20015640 20010307

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP  
KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO  
RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 1058437

English Abstract

The invention provides proteins from group B streptococcus (*Streptococcus agalactiae*) and group A streptococcus (*Streptococcus pyogenes*), including amino acid sequences and the corresponding nucleotide sequences. Data are given to show that the proteins are useful antigens for vaccines, immunogenic compositions, and/or diagnostics. The proteins are also targets for antibiotics.

French Abstract

Cette invention se rapporte a des proteines derivees du streptocoque de groupe B (*Streptococcus agalactiae*) et du streptocoque de groupe A (*Streptococcus pyogenes*), y compris des sequences d'acides amines et les sequences de nucleotides correspondantes. On produit des donnees qui montrent que ces proteines constituent des antigenes utiles pour des vaccins, des compositions immunogenes et/ou des diagnostics. Ces proteines constituent egalement des cibles pour des antibiotiques.

5/3,AB/5 (Item 5 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

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00895045

CHLAMYDIA PMP PROTEINS, GENE SEQUENCES AND USES THEREOF

PROTEINES PMP DE CHLAMYDIA, SEQUENCES DE GENE ET UTILISATION DE CELLES-CI

Patent Applicant/Assignee:

ANTEX BIOLOGICS INC, 300 Professional Drive, Gaithersburg, MD 20879, US,  
US (Residence), US (Nationality), (For all designated states except:  
US)

Patent Applicant/Inventor:

JACKSON W James, 1687 Armistice Way, Marriottsville, MD 21104, US, US  
(Residence), US (Nationality), (Designated only for: US)

Legal Representative:

BALDWIN Geraldine F (et al) (agent), Pennie & Edmonds LLP, 1155 Avenue of  
the Americas, New York, NY 10036, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200228998 A2 20020411 (WO 0228998)

Application: WO 2001US30345 20010928 (PCT/WO US0130345)

Priority Application: US 2000677752 20001002

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU

CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP

KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU

SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 36905

English Abstract

The invention discloses the Chlamydia PMPE and PMPI polypeptide, polypeptides derived therefor, (PMP-derived polypeptides), nucleotide sequences encoding said polypeptides, antibodies that specifically bind the PMP polypeptides and PMP-derived polypeptides and T-cells specific for PMP polypeptides and PMP-derived polypeptides. Also disclosed are prophylactic and therapeutic compositions, including immunogenic compositions, e.g., vaccines, comprising PMP polypeptides or PMP-derived polypeptides or antibodies thereto. The invention additionally discloses methods of inducing in animals an immune response to Chlamydia cells, Chlamydia elementary bodies, and/or cells expressing Chlamydial proteins, e.g., cell infected with Chlamydia.

French Abstract

La presente invention concerne le polypeptide PMPE et PMPI de chlamydia, des polypeptides derives de celui-ci (polypeptides derives de PMP), des sequences nucleotidiques codantes pour ces polypeptides, des anticorps qui se lient specifiquement a ces polypeptides PMP et a ces polypeptides derives de PMP et des lymphocytes T specifiques pour ces polypeptides PMP et ces polypeptides derives de PMP. Cette invention concerne aussi des compositions prophylactiques et therapeutiques, comprenant des composition immunogenes, par exemple des vaccins, comprenant ces polypeptides PMP, ces polypeptides derives de PMP ou des anticorps de ceux-ci. Cette invention concerne enfin des techniques permettant d'induire chez des animaux une reponse immunitaire des cellules a chlamydia, des corps elementaires de chlamydia, et/ou des cellules exprimant les proteines de chlamydia, par exemple une cellule infectee par chlamydia.

5/3,AB/6 (Item 6 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

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00850229

REGULATED ANTIGEN DELIVERY SYSTEM (RADS) INVOLVING BACTERIA

SYSTEME DE TRANSFERT D'ANTIGENE REGULE (RADS)

Patent Applicant/Assignee:

WASHINGTON UNIVERSITY, One Brookings Drive, St. Louis, MO 63130, US, US  
(Residence), US (Nationality), (For all designated states except: US)

MEGAN HEALTH INC, 3655 Vista, St. Louis, MO 63110, US, US (Residence), US

(Nationality), (For all designated states except: US)  
Patent Applicant/Inventor:  
CURTISS Roy III, 6065 Lindell Boulevard, St. Louis, MO 63112, US, US  
(Residence), US (Nationality), (Designated only for: US)  
TINGE Steven A, 52 Lindenleaf Lane, Belleville, IL 62223, US, US  
(Residence), US (Nationality), (Designated only for: US)  
Legal Representative:  
KASTEN Daniel S (et al) (agent), Howell & Haferkamp, L.C., Suite 1400,  
7733 Forsyth Blvd., St. Louis, MO 63105-1817, US,  
Patent and Priority Information (Country, Number, Date):  
Patent: WO 200183785 A2-A3 20011108 (WO 0183785)  
Application: WO 2001US13915 20010430 (PCT/WO US0113915)  
Priority Application: US 2000560539 20000428  
Parent Application/Grant:  
Related by Continuation to: US 2000560539 20000428 (CON)  
Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ  
DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ  
LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG  
SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM  
Publication Language: English  
Filing Language: English  
Fulltext Word Count: 27902

#### English Abstract

We describe a regulated antigen delivery system (RADS) that has (a) a vector that includes (1) a gene encoding a desired gene product operably linked to a control sequence, (2) an origin of replication conferring vector replication using DNA polymerase III, and (3) an origin of replication conferring vector replication using DNA polymerase I, where the second origin of replication is operably linked to a control sequence that is repressible by a repressor. The RADS microorganism also has a gene encoding a repressor, operably linked to an activatable control sequence. The RADS described provide high levels of the desired gene product after repression of the high copy number origin of replication is lifted. The RADS are particularly useful as live bacterial vaccines. Also described is a delayed RADS system, in which there is a delay before the high copy number origin is expressed after the repression is lifted. The delayed RADS is also particularly useful for live bacterial vaccines. Also described are several control elements useful for these systems, as well as methods for providing immunity to a pathogen in a vertebrate immunized with the RADS microorganisms.

#### French Abstract

Cette invention decrit un systeme de transfert d'antigene regule (RADS), qui comprend (a) un vecteur contenant (1) un gene codant un produit genique desire lie fonctionnellement a une sequence de controle, (2) une origine de replication effectuant une replication vectorielle a l'aide d'ADN-polymerase III et (3) une origine de replication effectuant une replication vectorielle a l'aide d'ADN-polymerase I, la seconde origine de replication etant liee fonctionnellement a une sequence de controle qui est repressible par un repressur. Ce micro-organisme RADS comprend egalement un gene codant un repressur, lie fonctionnellement a une sequence de controle activable. Le systeme RADS decrit ici fournit des niveaux eleves du produit genique desire, apres que la repression de l'origine de replication a nombre de copies eleve a ete levee. Ces systemes RADS sont particulierement utiles comme vaccins bacteriens vivants. Cette invention concerne egalement un systeme RADS retarde, dans lequel il y a un delai avant que l'origine a nombre de copies eleve soit exprimee, apres que la repression a ete levee. Le systeme RADS ainsi retarde est egalement particulierement utile pour des vaccins bacteriens vivants. Cette invention se rapporte en outre a plusieurs elements de controle utiles dans ces systemes, ainsi qu'a des procedes servant a assurer l'immunité a un pathogene dans un vertebre immunise avec ces micro-organismes RADS.

5/3,AB/7 (Item 7 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00845150

LACTOCOCCUS LACTIS GENOME, POLYPEPTIDES AND USES  
GENOME DE LACTOCOCCUS LACTIS, POLYPEPTIDES ET UTILISATIONS

Patent Applicant/Assignee:

INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE, 145, rue de l'Universite,  
F-75007 Paris, FR, FR (Residence), FR (Nationality), (For all  
designated states except: US)

Patent Applicant/Inventor:

BOLOTINE Alexandre, 5, rue du Marechal Gallieni, F-54000 Nancy, FR, FR  
(Residence), RU (Nationality), (Designated only for: US)  
SOROKINE Alexei, 8, Residence des Quinquonces, F-91190 Gif-sur-Yvette, FR  
, FR (Residence), RU (Nationality), (Designated only for: US)  
RENAULT Pierre, 9, rue Magellan, Residence les Arcades, F-78180 Montigny  
le Bretonneux, FR, FR (Residence), FR (Nationality), (Designated only  
for: US)  
EHRlich Stanislav Dusko, 38, rue de Campo Formio, F-75013 Paris, FR, FR  
(Residence), FR (Nationality), (Designated only for: US)

Legal Representative:

MARTIN Jean-Jacques (et al) (agent), Cabinet Regimbeau, 20, rue de  
Chazelles, F-75847 Paris Cedex 17, FR,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200177334 A2-A3 20011018 (WO 0177334)  
Application: WO 2001FR1103 20010411 (PCT/WO FR0101103)  
Priority Application: FR 20004630 20000411

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR  
KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE  
SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: French

Filing Language: French

Fulltext Word Count: 66071

English Abstract

The invention concerns the genome sequence and nucleotide sequences of  
Lactococcus lactis IL1403. The invention also concerns polypeptides of  
said organism, in particular cell envelope polypeptides, polypeptides  
involved in different metabolism cycles, resistance to phages or stress,  
or still secreted polypeptides. The invention further concerns the use of  
said sequences, and different tools for identifying L. lactis or  
associated species. Finally the invention concerns L. lactis strains  
modified so as to increase their industrial properties.

French Abstract

La presente invention concerne la sequence genomique et des sequences  
nucleotidiques de Lactococcus lactis IL1403. L'invention a egalement pour  
objet les polypeptides de cet organisme, en particulier les polypeptides  
d'enveloppe cellulaire, ou impliquees dans les differents cycles de  
metabolisme, la resistance aux phages ou au stress, ou encore secretees.  
L'invention concerne aussi les utilisations des sequences decrites, ainsi  
que differents outils permettant l'identification de L. lactis ou especes  
associees. L'invention concerne aussi des souches de L. lactis modifiees  
afin d'en augmenter les capacites industrielles.

5/3,AB/8 (Item 8 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00575936

%GRAM%- %POSITIVE% BACTERIA DEPRIVED OF %Htra% PROTEASIC ACTIVITY AND THEIR

Priority Application: US 9629930 19961101  
Designated States: CA JP US AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT  
SE  
Publication Language: English  
Fulltext Word Count: 22154

English Abstract

This invention relates to newly identified Streptococcal polynucleotides, polypeptides encoded by such polynucleotides, the uses of such polynucleotides and polypeptides, as well as the production of such polynucleotides and polypeptides and recombinant host cells transformed with the polynucleotides. This invention also relates to inhibiting the biosynthesis or action of such polynucleotides or polypeptides and to the use of such inhibitors in therapy.

French Abstract

L'invention concerne des polynucleotides de streptocoque nouvellement identifiés, des polypeptides codes par ces polynucleotides, l'utilisation et la fabrication desdits polypeptides et polynucleotides ainsi que des cellules de recombinaison transformées avec lesdits polynucleotides. L'invention concerne également l'inhibition de la biosynthèse ou de l'action desdits polypeptides ou polynucleotides, ainsi que l'utilisation thérapeutique des inhibiteurs obtenus.

5/3,AB/10 (Item 1 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2003 BIOSIS. All rts. reserv.

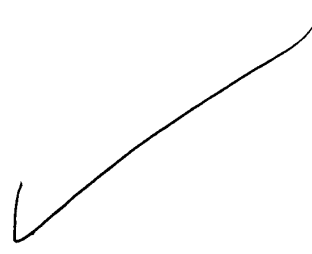
13083309 BIOSIS NO.: 200100290458  
Specific identification of *Lactobacillus* helveticus by PCR with pepC, pepN and *htrA* targeted primers.  
AUTHOR: Fortina M Grazia(a); Ricci Giovanni; Mora Diego; Parini Carlo; Manachini P Luigi  
AUTHOR ADDRESS: (a)Dipartimento di Scienze e Tecnologie Alimentari e Microbiologiche, Sezione di Microbiologia Industriale, Università degli Studi di Milano, Via Celoria 2, 20133, Milan: grazia.fortina@unimi.it\*\* Italy  
JOURNAL: FEMS Microbiology Letters 198 (1):p85-89 20 April, 2001  
MEDIUM: print  
ISSN: 0378-1097  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: English  
SUMMARY LANGUAGE: English

ABSTRACT: Specific regions in three genes coding for aminopeptidases C and N, and a trypsin-like serine protease were selected as species-specific primer sequences for rapid and reliable identification of *Lactobacillus* helveticus strains. The PCR procedures carried out gave specific 524-, 726- and 918-bp amplicates, with DNA isolated from *L. helveticus*. No PCR product was generated for closely related bacteria. The amplification products were also screened for their species specificity in dot blot hybridization with representatives of the most closely related genera and species and a number of other bacterial species.

2001

5/3,AB/11 (Item 2 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2003 BIOSIS. All rts. reserv.

11789812 BIOSIS NO.: 199900035921  
Molecular characterization of a stress-inducible gene from *Lactobacillus* helveticus.  
AUTHOR: Smeds Andreas; Varmanen Pekka; Palva Airi(a)  
AUTHOR ADDRESS: (a)Fac. Vet. Med./Dep. Basic Veterinary Sci., P.O. 57, Univ. Helsinki, 00014 Helsinki\*\*Finland





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ISSN: 0021-9193  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: English

ABSTRACT: A gene (%htrA%) coding for a stress-inducible %HtrA%-like protein from %Lactobacillus% helveticus CNRZ32 was cloned, sequenced, and characterized. The deduced amino acid sequence of the gene exhibited 30% identity with the %HtrA% protein from Escherichia coli; the putative catalytic triad and a PDZ domain that characterize the %HtrA% family of known bacterial serine proteases were also found in the sequence. Expression of the L. helveticus %htrA% gene in a variety of stress conditions was analyzed at the transcriptional level. The strongest induction, resulting in over an eightfold increase in the %htrA% transcription level, was found in growing CNRZ32 cells exposed to 4% (wt/vol) NaCl. Enhanced %htrA% mRNA expression was also seen in CNRZ32 cells after exposure to puromycin, ethanol, or heat. The reporter gene gusA was integrated in the %Lactobacillus% chromosome downstream of the %htrA% promoter by a double-crossover event which also interrupted the wild-type gene. The expression of gusA in the stress conditions tested was similar to that of %htrA% itself. In addition, the presence of an intact %htrA% gene facilitated growth under heat stress but not under salt stress.

ON  
PTD  
1449

1998

5/3,AB/12 (Item 1 from file: 399)  
DIALOG(R)File 399:CA SEARCH(R)  
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133085092 CA: 133(7)85092u PATENT  
Gram-positive bacteria deficient in the htrA proteinase involved in the degradation of secreted proteins and their uses  
INVENTOR(AUTHOR): Poquet, Isabelle; Gruss, Alexandra; Bolotine, Alexandre ; Sorokine, Alexei  
LOCATION: Fr.  
ASSIGNEE: Institut National de la Recherche Agronomique  
PATENT: PCT International ; WO 200039309 A1 DATE: 20000706  
APPLICATION: WO 99FR3270 (19991223) \*FR 9816462 (19981224)  
PAGES: 43 pp. CODEN: PIXXD2 LANGUAGE: French CLASS: C12N-015/57A; C12N-009/52B; C12R-001/225B DESIGNATED COUNTRIES: AE; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; CA; CH; CN; CR; CU; CZ; DE; DK; DM; EE; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MA; MD; MG; MK; MN; MW; MX; NO; NZ; PL; PT; RO; RU; SD; SE; SG; SI; SK; SL; TJ; TM; TR; TT; TZ; UA; UG; US; UZ; VN; YU; ZA; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM DESIGNATED REGIONAL: GH; GM; KE; LS; MW; SD; SL; SZ ; TZ; UG; ZW; AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE; BF; BJ; CF; CG; CI; CM; GA; GN; GW; ML; MR; NE; SN; TD; TG  
?

applicant

et	Items	Description
S1	2151	HTRA
S2	192	S1 AND GRAM (1W) POSITIVE
S3	155	RD (unique items)
S4	12	S3 AND LACTOBACILLUS
S5	12	RD (unique items)
? s s3 and lactococcus		
	155	S3
	47556	LACTOCOCCUS
S6	12	S3 AND LACTOCOCCUS

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>>>Duplicate detection is not supported for File 349.  
>>>Duplicate detection is not supported for File 398.  
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>>>No matching display code(s) found in file(s): 65, 107, 128-129, 135, 225, 342, 345, 398, 449, 767

7/3,AB/1 (Item 1 from file: 440)  
DIALOG(R)File 440:Current Contents Search(R)  
(c) 2003 Inst for Sci Info. All rts. reserv.

14442617 Document Delivery Available: 000177260500036 References: 55  
TITLE: The peptidyl-prolyl isomerase motif is lacking in PmpA, the  
prsA-like protein involved in the secretion machinery of *Lactococcus*  
*lactis*  
AUTHOR(S): Drouault S; Anba J; Bonneau S; Bolotin A; Ehrlich SD; Renault  
P (REPRINT)  
AUTHOR(S) E-MAIL: renauld@jouy.inra.fr  
CORPORATE SOURCE: INRA, Unite Genet Microbienne, /F-78352 Jouy En  
Josas//France/ (REPRINT); INRA, Unite Genet Microbienne, /F-78352 Jouy En  
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3932-3942  
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PUBLISHER: AMER SOC MICROBIOLOGY, 1752 N ST NW, WASHINGTON, DC 20036-2904  
USA  
ISSN: 0099-2240  
LANGUAGE: English DOCUMENT TYPE: ARTICLE

ABSTRACT: The prsA-like gene from *Lactococcus* *lactis* encoding its single  
homologue to PrsA, an essential protein triggering the folding of secreted  
proteins in *Bacillus subtilis*. was characterized. This gene, annotated  
pmpA, encodes a lipoprotein of 309 residues whose expression is increased  
7- to 10-fold when (fie source of nitrogen is limited. A slight increase in  
the expression of the PrsA-like protein (PLP) in *L. lactis* removed the  
degradation products previously observed with the *Staphylococcus hyicus*  
lipase used as a model secreted protein. This shows that PmpA either  
triggers the folding of the secreted lipase or activates its degradation by  
the cell surface protease HtrA%. Unlike the case for *B. subtilis*, the  
inactivation of the gene encoding PmpA reduced only slightly the growth  
rate of *L. lactis* in standard conditions. However, it almost stopped its

(utility model) DK DM DZ EC EE (utility model) EE ES FI (utility model)  
FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU  
LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK  
(utility model) SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 15714

English Abstract

The invention provides a method for improving binding of a proteinaceous substance to cell-wall material of a %Gram%-positive bacterium, said substance comprising an AcmA cell wall binding domain or homolog or functional derivative thereof, said method comprising treating said cell-wall material with a solution capable of removing a cell-wall component such as a protein, (lipo) teichoic acid or carbohydrate from said cell-wall-material and contacting said substance with said cell-wall material.

French Abstract

La presente invention concerne une technique permettant d'ameliorer la liaison d'une substance proteique a la paroi cellulaire d'une bacterie Gram positif, cette substance comprenant un domaine de fixation de paroi de cellule AcmA ou un homologue ou un derive fonctionnel de celui-ci. Cette technique consiste a traiter cette paroi cellulaire avec une solution capable de retirer un element de cette paroi cellulaire tel qu'une proteine, un acide (lipo)teichoique ou un element glucidique de cette paroi et de mettre en contact cette substance avec cette paroi cellulaire.

7/3,AB/5 (Item 2 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00901997

NUCLEIC ACIDS AND PROTEINS FROM STREPTOCOCCUS GROUPS A & B

ACIDES NUCLEIQUES ET PROTEINES DERIVES DES GROUPES DE STREPTOCOQUES A ET B

Patent Applicant/Assignee:

CHIRON S P A, Via Fiorentina, 1, I-53100 Siena, IT, IT (Residence), IT (Nationality), (For all designated states except: US)

THE INSTITUTE FOR GENOMIC RESEARCH, 9712 Medical Center Drive, Rockville, MD 20850, US, US (Residence), US (Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

TELFORD John, Chiron S.p.a, Via Fiorentina, 1, I-53100 Siena, IT, IT (Residence), GB (Nationality), (Designated only for: US)

MASIGNANI Vega, Chiron S.p.a, Via Fiorentina, 1, I-53100 Siena, IT, IT (Residence), IT (Nationality), (Designated only for: US)

MARGARIT Y ROS Immaculada, Chiron S.p.a, Via Fiorentina, 1, I-53100 Siena, IT, IT (Residence), IT (Nationality), (Designated only for: US)

GRANDI Guido, Chiron S.p.a, Via Fiorentina, 1, I-53100 Siena, IT, IT (Residence), IT (Nationality), (Designated only for: US)

FRASER CLAIRE, The Institute for Genomic Research, 9712 Medical Center Drive, Rockville, MD 20850, US, US (Residence), US (Nationality), (Designated only for: US)

TETTELIN Herve, The Institute for Genomic Research, 9712 Medical Center Drive, Rockville, MD 20850, US, US (Residence), BE (Nationality), (Designated only for: US)

Legal Representative:

HALLYBONE Huw George (et al) (agent), Carpmiels & Ransford, 43 Bloomsbury Square, London WC1A 2RA, GB,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200234771 A2-A3 20020502 (WO 0234771)

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Priority Application: GB 200026333 20001027; GB 200028727 20001124; GB 20015640 20010307

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CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP  
KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO  
RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM  
Publication Language: English  
Filing Language: English  
Fulltext Word Count: 1058437

#### English Abstract

The invention provides proteins from group B streptococcus (*Streptococcus agalactiae*) and group A streptococcus (*Streptococcus pyogenes*), including amino acid sequences and the corresponding nucleotide sequences. Data are given to show that the proteins are useful antigens for vaccines, immunogenic compositions, and/or diagnostics. The proteins are also targets for antibiotics.

#### French Abstract

Cette invention se rapporte a des proteines derivees du streptocoque de groupe B (*Streptococcus agalactiae*) et du streptocoque de groupe A (*Streptococcus pyogenes*), y compris des sequences d'acides amines et les sequences de nucleotides correspondantes. On produit des donnees qui montrent que ces proteines constituent des antigenes utiles pour des vaccins, des compositions immunogenes et/ou des diagnostics. Ces proteines constituent egalement des cibles pour des antibiotiques.

7/3,AB/6 (Item 3 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00845150

%LACTOCOCCUS% LACTIS GENOME, POLYPEPTIDES AND USES  
GENOME DE %LACTOCOCCUS% LACTIS, POLYPEPTIDES ET UTILISATIONS

#### Patent Applicant/Assignee:

INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE, 145, rue de l'Universite,  
F-75007 Paris, FR, FR (Residence), FR (Nationality), (For all  
designated states except: US)

#### Patent Applicant/Inventor:

BOLOTINE Alexandre, 5, rue du Marechal Gallieni, F-54000 Nancy, FR, FR  
(Residence), RU (Nationality), (Designated only for: US)  
SOROKINE Alexei, 8, Residence des Quinquonces, F-91190 Gif-sur-Yvette, FR  
, FR (Residence), RU (Nationality), (Designated only for: US)  
RENAULT Pierre, 9, rue Magellan, Residence les Arcades, F-78180 Montigny  
le Bretonneux, FR, FR (Residence), FR (Nationality), (Designated only  
for: US)  
EHRlich Stanislav Dusko, 38, rue de Campo Formio, F-75013 Paris, FR, FR  
(Residence), FR (Nationality), (Designated only for: US)

#### Legal Representative:

MARTIN Jean-Jacques (et al) (agent), Cabinet Regimbeau, 20, rue de  
Chazelles, F-75847 Paris Cedex 17, FR,

#### Patent and Priority Information (Country, Number, Date):

Patent: WO 200177334 A2-A3 20011018 (WO 0177334)  
Application: WO 2001FR1103 20010411 (PCT/WO FR0101103)  
Priority Application: FR 20004630 20000411

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR  
KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE  
SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: French  
Filing Language: French  
Fulltext Word Count: 66071

English Abstract

The invention concerns the genome sequence and nucleotide sequences of %Lactococcus% lactis IL1403. The invention also concerns polypeptides of said organism, in particular cell envelope polypeptides, polypeptides involved in different metabolism cycles, resistance to phages or stress, or still secreted polypeptides. The invention further concerns the use of said sequences, and different tools for identifying L. lactis or associated species. Finally the invention concerns L. lactis strains modified so as to increase their industrial properties.

French Abstract

La presente invention concerne la sequence genomique et des sequences nucleotidiques de %Lactococcus% lactis IL1403. L'invention a egalement pour objet les polypeptides de cet organisme, en particulier les polypeptides d'enveloppe cellulaire, ou impliquees dans les differents cycles de metabolisme, la resistance aux phages ou au stress, ou encore secretes. L'invention concerne aussi les utilisations des sequences decrites, ainsi que differents outils permettant l'identification de L. lactis ou especes associees. L'invention concerne aussi des souches de L. lactis modifiees afin d'en augmenter les capacites industrielles.

7/3,AB/7 (Item 4 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT  
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00822994

NUCLEIC ACIDS, PROTEINS, AND ANTIBODIES  
ACIDES NUCLEIQUES, PROTEINES ET ANTICORPS

Patent Applicant/Assignee:

HUMAN GENOME SCIENCES INC, 9410 Key West Avenue, Rockville, MD 20850, US,  
US (Residence), US (Nationality), (For all designated states except:  
US)

Patent Applicant/Inventor:

ROSEN Craig A, 22400 Rolling Hill Lane, Laytonsville, MD 20882, US, US  
(Residence), US (Nationality), (Designated only for: US)  
BARASH Steven C, 111 Watkins Pond Boulevard #301, Rockville, MD 20850, US  
, US (Residence), US (Nationality), (Designated only for: US)  
RUBEN Steven M, 18528 Heritage Hills Drive, Olney, MD 20832, US, US  
(Residence), US (Nationality), (Designated only for: US)

Legal Representative:

HOOVER Kenley K (et al) (agent), Human Genome Sciences, Inc., 9410 Key  
West Avenue, Rockville, MD 20850, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200155301 A2 20010802 (WO 0155301)

Application: WO 2001US1239 20010117 (PCT/WO US0101239)

Priority Application: US 2000179065 20000131; US 2000180628 20000204; US  
2000184664 20000224; US 2000186350 20000302; US 2000189874 20000316; US  
2000190076 20000317; US 2000198123 20000418; US 2000205515 20000519; US  
2000209467 20000607; US 2000214886 20000628; US 2000215135 20000630; US  
2000216647 20000707; US 2000216880 20000707; US 2000217487 20000711; US  
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2000225447 20000814; US 2000225267 20000814; US 2000225758 20000814; US  
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2000225759 20000814; US 2000225213 20000814; US 2000225266 20000814; US  
2000225214 20000814; US 2000226279 20000818; US 2000226868 20000822; US  
2000227182 20000822; US 2000226681 20000822; US 2000227009 20000823; US  
2000228924 20000830; US 2000229344 20000901; US 2000229343 20000901; US  
2000229287 20000901; US 2000229345 20000901; US 2000229513 20000905; US  
2000229509 20000905; US 2000230438 20000906; US 2000230437 20000906; US  
2000231413 20000908; US 2000232080 20000908; US 2000231414 20000908; US  
2000231244 20000908; US 2000232081 20000908; US 2000231242 20000908; US  
2000231243 20000908; US 2000231968 20000912; US 2000232401 20000914; US  
2000232399 20000914; US 2000232400 20000914; US 2000232397 20000914; US  
2000233063 20000914; US 2000233064 20000914; US 2000233065 20000914; US  
2000232398 20000914; US 2000234223 20000921; US 2000234274 20000921; US  
2000234997 20000925; US 2000234998 20000925; US 2000235484 20000926; US

2000235834 20000927; US 2000235836 20000927; US 2000236369 20000929; US  
2000236327 20000929; US 2000236370 20000929; US 2000236368 20000929; US  
2000236367 20000929; US 2000237039 20001002; US 2000237038 20001002; US  
2000237040 20001002; US 2000237037 20001002; US 2000236802 20001002; US  
2000239937 20001013; US 2000239935 20001013; US 2000241785 20001020; US  
2000241809 20001020; US 2000240960 20001020; US 2000241787 20001020; US  
2000241808 20001020; US 2000241221 20001020; US 2000241786 20001020; US  
2000241826 20001020; US 2000244617 20001101; US 2000246474 20001108; US  
2000246532 20001108; US 2000246476 20001108; US 2000246526 20001108; US  
2000246475 20001108; US 2000246525 20001108; US 2000246528 20001108; US  
2000246527 20001108; US 2000246477 20001108; US 2000246611 20001108; US  
2000246610 20001108; US 2000246613 20001108; US 2000246609 20001108; US  
2000246478 20001108; US 2000246524 20001108; US 2000246523 20001108; US  
2000249299 20001117; US 2000249210 20001117; US 2000249216 20001117; US  
2000249217 20001117; US 2000249211 20001117; US 2000249215 20001117; US  
2000249218 20001117; US 2000249208 20001117; US 2000249213 20001117; US  
2000249212 20001117; US 2000249207 20001117; US 2000249245 20001117; US  
2000249244 20001117; US 2000249297 20001117; US 2000249214 20001117; US  
2000249264 20001117; US 2000249209 20001117; US 2000249300 20001117; US  
2000249265 20001117; US 2000250391 20001201; US 2000250160 20001201; US  
2000256719 20001205; US 2000251030 20001205; US 2000251988 20001205; US  
2000251479 20001206; US 2000251869 20001208; US 2000251856 20001208; US  
2000251868 20001208; US 2000251990 20001208; US 2000251989 20001208; US  
2000254097 20001211; US 2001259678 20010105

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ  
DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ  
LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG  
SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 286526

#### English Abstract

The present invention relates to novel proteins. More specifically, isolated nucleic acid molecules are provided encoding novel polypeptides. Novel polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human polynucleotides and/or polypeptides, and antibodies. The invention further relates to diagnostic and therapeutic methods useful for diagnosing, treating, preventing and/or prognosing disorders related to these novel polypeptides. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compositions for inhibiting or enhancing the production and function of the polypeptides of the present invention.

#### French Abstract

La presente invention concerne de nouvelles proteines. Plus specifiquement, l'invention concerne des molecules d'acides nucleiques isolees codant de nouveaux polypeptides. L'invention concerne egalement des nouveaux polypeptides et des anticorps se fixant a ces polypeptides. De plus, l'invention concerne des vecteurs, des cellules hotes ainsi que des methodes de recombinaison et de synthese permettant la production de polynucleotides et/ou polypeptides ainsi que des anticorps humains. L'invention concerne aussi des methodes diagnostiques et therapeutiques utiles pour diagnostiquer, traiter, prevenir et/ou pronostiquer des troubles lies a ces nouveaux polypeptides. L'invention concerne aussi des methodes de criblage permettant d'identifier des agonistes et des antagonistes de polynucleotides et de polypeptides de l'invention. En outre l'invention concerne des methodes et/ou des compositions destinees a inhiber ou a augmenter la production et la fonction des polypeptides de la presente invention.

7/3,AB/8 (Item 5 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00575936

%GRAM%-%POSITIVE% BACTERIA DEPRIVED OF %HtrA% PROTEASIC ACTIVITY AND THEIR  
USES  
BACTERIES A GRAM POSITIF DEPOURVUES D'ACTIVITE PROTEASIQUE %HtrA%, ET LEURS  
UTILISATIONS

Patent Applicant/Assignee:

INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE,  
POQUET Isabelle,  
GRUSS Alexandra,  
BOLOTINE Alexandre,  
SOROKINE Alexei,

Inventor(s):

POQUET Isabelle,  
GRUSS Alexandra,  
BOLOTINE Alexandre,  
SOROKINE Alexei,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200039309 A1 20000706 (WO 0039309)  
Application: WO 99FR3270 19991223 (PCT/WO FR9903270)  
Priority Application: FR 9816462 19981224

Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK  
DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ  
TM TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ TZ UG ZW AM  
AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL  
PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

Publication Language: French

Fulltext Word Count: 9474

English Abstract

The invention concerns bacteria strains, obtained from %gram%-%positive%  
bacteria whereof the genome size is not more than 3.2 Mb, and wherein the  
%HtrA% surface protease is inactive. Said strains are useful for  
expressing exported proteins of interest.

French Abstract

L'invention concerne des souches bacteriennes, obtenues a partir de  
bacteries a gram-positif dont la taille du genome est au plus egale a 3,2  
Mb, et dans lesquelles la protease de surface %HtrA% est inactive. Ces  
souches sont utilisables pour l'expression de proteines d'interet  
exportees.

7/3,AB/9 (Item 6 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00497123

i(CHLAMYDIA TRACHOMATIS) GENOMIC SEQUENCE AND POLYPEPTIDES, FRAGMENTS  
THEREOF AND USES THEREOF, IN PARTICULAR FOR THE DIAGNOSIS, PREVENTION  
AND TREATMENT OF INFECTION  
SEQUENCE GENOMIQUE ET POLYPEPTIDES DE CHLAMYDIA TRACHOMATIS, LEURS  
FRAGMENTS ET LEURS UTILISATIONS, EN PARTICULIER, POUR LE DIAGNOSTIC, LA  
PREVENTION ET LE TRAITEMENT DE L'INFECTION

Patent Applicant/Assignee:

GENSET,  
GRIFFAIS Remy,

Inventor(s):

GRIFFAIS Remy,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9928475 A2 19990610  
Application: WO 98IB1939 19981127 (PCT/WO IB9801939)  
Priority Application: FR 9715041 19971128; FR 9716034 19971217; US  
98107077 19981104

Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES

*A patent*

FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD  
MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US  
UZ VN YU ZW GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE  
CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN  
GW ML MR NE SN TD TG

Publication Language: English  
Fulltext Word Count: 87533

#### English Abstract

The subject of the invention is the genomic sequence and the nucleotide sequences encoding polypeptides of *i*(Chlamydia trachomatis), such as cellular envelope polypeptides, which are secreted or specific, or which are involved in metabolism, in the replication process or in virulence, polypeptides encoded by such sequences, as well as vectors including the said sequences and cells or animals transformed with these vectors. The invention also relates to transcriptional gene products of the *i*(Chlamydia trachomatis) genome, such as, for example, antisense and ribozyme molecules, which can be used to control growth of the microorganism. The invention also relates to methods of detecting these nucleic acids or polypeptides and kits for diagnosing *i*(Chlamydia trachomatis) infection. The invention also relates to a method of selecting compounds capable of modulating bacterial infection and a method for the biosynthesis or biodegradation of molecules of interest using the said nucleotide sequences or the said polypeptides. The invention finally comprises, pharmaceutical, in particular vaccine, compositions for the prevention and/or treatment of bacterial, in particular *i*(Chlamydia trachomatis), infections.

#### French Abstract

L'invention concerne la sequence genomique et les sequences de nucleotides codant des polypeptides de Chlamydia trachomatis, tels que des polypeptides d'enveloppe cellulaire, qui sont secretes ou specifiqués ou jouent un role dans le metabolisme, dans le processus de replication ou dans la virulence, des polypeptides codes par ces sequences, ainsi que des vecteurs comprenant lesdites sequences et des cellules ou des animaux transformes par ces vecteurs. Elle concerne egalement des produits geniques de transcription du genome de Chlamydia trachomatis, tels que, par exemple, des molecules antisens et des molecules de ribozymes, qu'on peut utiliser afin de controler la croissance du micro-organisme. Elle concerne egalement des procedes servant a detecter ces acides nucleiques ou ces polypeptides et des troussees servant a diagnostiquer une infection par Chlamydia trachomatis. Elle concerne egalement un procede de selection de composees capables de moduler l'infection bacterienne et un procede de biosynthese ou de biodegradation de molecules cibles au moyen desdites sequences de nucleotides ou desdits polypeptides. Elle concerne enfin des compositions pharmaceutiques, en particulier, des compositions de vaccins, servant a prevenir ou a traiter des infections bacteriennes, en particulier, des infections par Chlamydia trachomatis.

7/3,AB/10 (Item 7 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT  
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00495753

*i*(CHLAMYDIA PNEUMONIAE) GENOMIC SEQUENCE AND POLYPEPTIDES, FRAGMENTS THEREOF AND USES THEREOF, IN PARTICULAR FOR THE DIAGNOSIS, PREVENTION AND TREATMENT OF INFECTION  
SEQUENCE GENOMIQUE ET POLYPEPTIDES DE *i*(CHLAMYDIA PNEUMONIAE), LEURS FRAGMENTS ET LEURS UTILISATIONS, EN PARTICULIER POUR LE DIAGNOSTIC, LA PREVENTION OU LE TRAITEMENT D'UNE INFECTION

Patent Applicant/Assignee:

GENSET,

GRIFFAIS Remy,

Inventor(s):

GRIFFAIS Remy,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9927105 A2 19990603

Application: WO 98IB1890 19981120 (PCT/WO IB9801890)



Priority Application: FR 9714673 19971121; US 98107078 19981104  
Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES  
FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD  
MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US  
UZ VN YU ZW GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE  
CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN  
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#### English Abstract

The subject of the invention is the genomic sequence and the nucleotide sequences encoding polypeptides of *i*(Chlamydia pneumoniae), such as cellular envelope polypeptides, which are secreted or specific, or which are involved in metabolism, in the replication process or in virulence, polypeptides encoded by such sequences, as well as vectors including the said sequences and cells or animals transformed with these vectors. The invention also relates to transcriptional gene products of the *i*(Chlamydia pneumoniae) genome, such as, for example, antisense and ribozyme molecules, which can be used to control growth of the microorganism. The invention also relates to methods of detecting these nucleic acids or polypeptides and kits for diagnosing *i*(Chlamydia pneumoniae) infection. The invention also relates to a method of selecting compounds capable of modulating bacterial infection and a method for the biosynthesis or biodegradation of molecules of interest using the said nucleotide sequences or the said polypeptides. The invention finally comprises, pharmaceutical, in particular vaccine, compositions for the prevention and/or treatment of bacterial, in particular *i*(Chlamydia pneumoniae), infections.

#### French Abstract

L'objet de l'invention est la sequence genomique et les sequences nucleotidiques codant des polypeptides de *i*(Chlamydia pneumoniae), tels que des polypeptides d'enveloppe cellulaire, secretes ou specifiques, ou intervenant dans le metabolisme, dans le processus de replication ou dans la virulence, des polypeptides codes par de telles sequences, ainsi que des vecteurs incluant lesdites sequences et des cellules ou animaux manipules au moyen desdits vecteurs. L'invention concerne des produits geniques transcriptionnels du genome de *i*(Chlamydia pneumoniae), tels que, par exemple, des molecules antisens ou ribozymatiques pouvant etre utilisees pour reguler la croissance du micro-organisme. L'invention concerne aussi des procedes de detection desdits acides nucleiques ou polypeptides et des troussees permettant de diagnostiquer une infection a *i*(Chlamydia pneumoniae). L'invention concerne en outre un procede de selection de composees pouvant moduler une infection bacterienne, et un procede mettant en oeuvre ces sequences nucleotidiques ou ces polypeptides pour realiser la biosynthese ou la biodegradation de molecules d'etude. L'invention concerne enfin des produits pharmaceutiques, en particulier des vaccins, et des compositions servant a la prevention et/ou au traitement d'infections bacteriennes, notamment d'infections a *i*(Chlamydia pneumoniae).

7/3,AB/11 (Item 8 from file: 349)  
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NOVEL CODING SEQUENCES

NOUVELLES SEQUENCES CODANTES

Patent Applicant/Assignee:

SMITHKLINE BEECHAM CORPORATION,  
SMITHKLINE BEECHAM PLC,  
BLACK Michael Terance,  
HODGSON John Edward,  
KNOWLES David Justin Charles,  
LONETTO Michael Arthur,  
NICHOLAS Richard Oakley,  
REID Robert H Jr,

ZARFOS Phillip N,  
Inventor(s):  
BLACK Michael Terance,  
HODGSON John Edward,  
KNOWLES David Justin Charles,  
LONETTO Michael Arthur,  
NICHOLAS Richard Oakley,  
REID Robert H Jr,  
ZARFOS Phillip N,  
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English Abstract

This invention relates to newly identified Streptococcal polynucleotides, polypeptides encoded by such polynucleotides, the uses of such polynucleotides and polypeptides, as well as the production of such polynucleotides and polypeptides and recombinant host cells transformed with the polynucleotides. This invention also relates to inhibiting the biosynthesis or action of such polynucleotides or polypeptides and to the use of such inhibitors in therapy.

French Abstract

L'invention concerne des polynucleotides de streptocoque nouvellement identifiés, des polypeptides codes par ces polynucleotides, l'utilisation et la fabrication desdits polypeptides et polynucleotides ainsi que des cellules de recombinaison transformées avec lesdits polynucleotides. L'invention concerne également l'inhibition de la biosynthèse ou de l'action desdits polypeptides ou polynucleotides, ainsi que l'utilisation thérapeutique des inhibiteurs obtenus.

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Gram-positive bacteria deficient in the htrA proteinase involved in the degradation of secreted proteins and their uses  
INVENTOR(AUTHOR): Poquet, Isabelle; Gruss, Alexandra; Bolotine, Alexandre ; Sorokine, Alexei  
LOCATION: Fr.  
ASSIGNEE: Institut National de la Recherche Agronomique  
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